

**THE RELATION OF  
GOVERNMENT TO INDUSTRY**



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TORONTO

# THE RELATION OF GOVERNMENT TO INDUSTRY

BY  
MARK L. REQUA

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## FOREWORD

ALL progress is founded upon the desire of mankind for human betterment. Liberty, freedom, the right of the individual to meet his fellow man upon terms of equality, these are the foundation stones upon which human advancement rests. Liberty, freedom, progress, betterment, these are the great underlying fundamentals that have throughout the ages advanced civilization to its present high state. All science, all invention, all development, is built upon these fundamental human characteristics. It is these mighty forces that some individuals affect to believe can be rendered impotent. As well attempt to check the tides, or halt the coming of the seasons. The very insistence of the demand is its danger, for impatient of restraint, unwilling to wait upon the slow evolution of generations, it has sought and will seek again short cuts and quack remedies, only to find that there is no royal road, and that whenever, and wherever, sound economics are ignored the penalty is always paid, the bitter cup of disappointment always drained to the dregs.

Progress of this kind cannot be halted; it may for one reason or another be checked for brief periods; it may move temporarily in the wrong direction, but of one thing we may be certain, it will not remain dormant over any long period of time.

Purely as a matter of self-preservation, therefore, it would seem that it is the task of every intelligent citizen to aid in directing the movement, in so far as possible, along sound economic lines and with due appreciation of the limitations and fallibility of human nature.

In human philosophy this instinct for betterment ranks second only to the creative instinct and the instinct for self-preservation. In some degree it may even be said to outrank these traits, for mankind has ever been willing to sacrifice life itself that the onward sweep of human liberty and freedom might not be hindered.

It has been the attainment of freedom that has made modern civilization possible. The right of the individual to labor and reap in full measure the reward of that labor has been productive of the multitude of things that are symbolic of human advancement. The infinite number of discoveries, inventions, improvements, that characterize the modern social structure as contrasted with the old are directly and entirely due to this freedom to create and reap the rewards arising from creative effort in the arts, in science, in industry, and in agriculture.

And yet, in the face of this, we have in every community the chauvinistic element, one faction of which demands reaction and the other ultra radicalism as the program of the future. Historical data amply prove both to be hopelessly in the wrong, and indicate clearly that it is the middle course alone that will produce the greatest amount of human

happiness. The efforts of mankind over thousands of years, in the struggle to progress, show the futility of the doctrine of reaction; historical data, over the same period, show that paternalism, socialism and communism, wherever tried, have not only failed to benefit but have often had the direct opposite effect even to the extent of destroying peoples and nations.

The question immediately arises as to what is the rational course to follow. Russia stands as ghastly proof of the folly of reaction on the one hand and communism on the other. Socialism, as most generally defined, amounts practically to communism, so there is left only paternalism to contest with individualism as the means of future human betterment.

If the old type of individual effort of a century ago was still the unchallenged force the problem would be simple. But there has arisen a new force to be reckoned with, the force of combined capital as typified by the great corporations of the present day. It has been satisfactorily and conclusively demonstrated that such aggregations of capital dealing with public necessities cannot be permitted to exercise totally untrammelled effort. There has, as a consequence, arisen the theory and practice of governmental regulation in behalf of the public. This practice affords the only satisfactory solution as between reaction on the one hand and radicalism on the other. But, in turn, there must be displayed in the exercise of this function an intelligence and wisdom unfortunately not always in evidence in the past.

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No one who will take the trouble to investigate can escape the conviction that through such regulation, wisely and intelligently administered, must come the future relationship between government and industry. Certainly no one who has investigated the subject can find justification for assuming that government ownership and operation—paternalism—will produce the slightest benefit, to say nothing of the utter futility of communism as the panacea.

We approach, therefore, a new era—the era of government regulation of certain industrial activities. It is fraught with danger because of the temptation that will be ever present to diverge from such regulation and follow the road leading to government ownership and operation. If attempted, there would be built up a tyranny of political control by public servants employed in connection with such enterprises that would be quite as destructive of real individual freedom as would reversion to some of the most objectionable monarchical types of government. If to this we add the hopeless inefficiency growing out of such control, due to enormous increase in personnel, decrease in unit output, and all the endless variety of causes that spring into existence wherever politics is in evidence, we have a combination that might become so destructive as to threaten the very life of our type of government.

The problem is a problem in human engineering, the development and results of which, given the will to accomplish, are quite as possible of accurate fore-

cast as is the accurate forecasting of the tides or the seasons. But development can come only through intelligent coöperation of all classes and of government, a condition heretofore lacking, and impossible of attainment save upon a high moral plane of mutual trust and confidence; the outgrowth of the knowledge that integrity and sincerity of purpose is the moving force in pleading a meritorious cause, and that effort built upon any other foundation is foredoomed to failure. Success manifestly lies only in the direction of honest statement of fundamental fact, in proving to the people that their own welfare rests upon wisely guiding the economic forces which throughout the ages have resisted human effort to counteract or destroy.

In these pages I have attempted to present thoughts growing out of years of experience as mining engineer, railway executive, consulting engineer, farmer, student of government, and public official. I have tried to show by historical reference:

- 1, that paternalism in government has always been highly detrimental to the people;
- 2, that the nationalization of industry,—government ownership, operation and unwise tinkering,—constitutes an attempt to frustrate economic law and is fatal to national prosperity;
- 3, that the doctrine of "least governed is best governed," with certain reservations, is sound in principle;
- 4, that there is a sharp distinction to be observed by government in its relations to great capital aggregations operating public utilities and to industrial enterprise of lesser magnitude and of private character;

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- 5, that much public service is best rendered by monopolistic control, and that monopoly necessitates, as its corollary, government regulation of rates in behalf of the public;
- 6, that our mineral resources are the basis of industrial prosperity and as they are being rapidly consumed and are irreplaceable, must be utilized with greatest efficiency. Their proper conservation gives rise to a distinct and separate problem in the relation of government to industry;
- 7, that the necessary governmental supervision has in the past often been unintelligent, unwise and detrimental to public welfare;
- 8, that proper governmental regulation, but not operation, of certain industrial activities is a necessary consequence of increasing population and modern methods; that its success in future depends upon a mutual respect, confidence and coöperation between government and industry, not heretofore in evidence and that can be attained only through the weight of public opinion;
- 9, that it should be the policy of the government to look far into the future and prepare to meet important events which are clearly foreshadowed. In legislating for such purpose, industry should be given ample time and opportunity (decades or generations) to adjust itself to new conditions;
- 10, that sudden and violent changes in the regulation of industry lead to disastrous disorganization;
- 11, that a rational understanding of the relation of government to industry involves the consideration of adjustments, the full accomplishment of which may take decades or generations.

No one could be more keenly conscious of the magnitude of the subject, no one more clearly aware of the inadequacy of its presentation, than myself. Indeed, the book is published wholly in the hope

hat it may cause other and more specific examinations of the subject with subsequent publication of conclusions reached. If in small degree it promotes intelligent discussion of the fundamentals upon which beneficent government must be founded, the effort will have been amply recompensed and justified.

MARK L. REQUA.

GREYSTONE,  
PIEDMONT, CALIFORNIA,  
JUNE, 1925.





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**THE RELATION OF  
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# THE RELATION OF GOVERNMENT TO INDUSTRY

## CHAPTER I

### GOVERNMENT AND INDUSTRY

THE rise of civilization has been due to the desire of peoples to promote their welfare and provide themselves in the fullest measure with the necessities and luxuries of life. These things can be produced by industry alone. It is essential, therefore, to a continuance of our present-day standards of civilization, that industry be fostered, protected and encouraged. This can be done only by government and is an essential undertaking of government. It follows, therefore, that the relation of government to industry is intimate, should be wise and should be clearly defined. Government should no more attempt the performance of the tasks of industry than industry should attempt the tasks of government. Both attempts equally can lead only to disaster. The development of industry is possible only under a stable government that promotes industry through guarantee of safety of life and property. Neither can exist without the other; both prosper in direct proportion to their harmonious coöperation. Hence the relation of government to industry.

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This relation as it now exists is complicated and difficult to define. It is the outgrowth of unsystematized attempts to meet changing conditions by haphazard regulations and repressive laws passed without study or plan, and in its effect it is burning the house to get rid of the rats.

An historical review will show the errors of the past and indicate the dangers of the future. It will also show that the problems of former times were simple as compared to those now confronting us. Progress has resulted in complications that grow still more complicated with each added decade. The difficulties of regulation have been greatly increased by the growth of population, the substitution of mechanical power for man power, the improved methods of communication and transportation, the higher standard of living that tends constantly to still further advancement. The people have become more fully informed of occurrences of the day. They have acquired definite opinions, often erroneous because based upon insufficient knowledge. Owing to all of this, their demands become more imperative; often impossible of achievement. Innumerable contributing causes, linked with modern industrial progress and scientific attainment, have given rise to problems which the government has been forced to consider in connection with the regulation of the industries. This regulation has often been unwise, unintelligent, sometimes vicious in character, seldom based upon any thorough comprehension of the underlying fundamentals, often directed by purely political consideration.

A detailed and comprehensive discussion of the

subject would involve an analysis of the whole sweep of modern civilization. Even cursory examination shows industrial interests intertwined with international as well as national affairs, and leads inevitably to the conclusion that national isolation is an impossibility even if it were desirable.

The legitimate object of government is the betterment of the social condition of peoples; the object of industry is to supply their material wants,—food, clothing, housing, luxuries and the like. The natural functions of government and industry, while interdependent, are clearly distinctive in character. The former provides protection of life and property, the latter provides material requirements. History abundantly supports the contention that wherever the one invades the legitimate function of the other disaster follows sooner or later. Government must see to it that industry does not become unduly rapacious, but has due regard for the health and safety of the community. This duty is not of necessity punitive. Punishment may, in last analysis, follow, but only after all other means have been exhausted.

No one will question but that the foundation stones of our national structure were laid in the belief that the best government was that which gave equal rights to all its citizens and after so doing left the utmost possible freedom to individual initiative, for only under such freedom could the genius of the people find wholesome development, mental, moral and national. No one will question but that the complicated development of modern civilization has made necessary government regulation and control

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in ways undreamed of when John Hancock affixed his famous signature to a still more famous document. But no one (certainly no one who believes in our principles of government) will contend that such regulation and control should go further than the needs of each case. This book is written to direct attention to the wrongs and injustices which such overregulation works, continuance of which threatens the existence of our national life.

Conservation of the natural resources of the country has come to be of the utmost national importance. Increase in population, with its increasing per capita consumption of raw materials, has created a condition definitely requiring most active and sympathetic government consideration. Recognition of this fact, without organized knowledge of the subject, has led to mistakes in government regulation that are without justification.

Comprehensive discussion of the relation between government and industry must embrace a field far wider than can be covered in this treatise. There are, however, certain outstanding facts that can be profitably presented from which certain deductions may be drawn, namely, that paternalism, in ancient as well as in modern times, has not only worked no benefit to mankind, but has been positively detrimental even to the extent of destroying nations, and plunging peoples into misery and want. If the public at large can be made to realize the truth of this statement, the menace of paternalism, of government ownership and operation, of socialism, communism and anarchy will have been banished for all time.



## CHAPTER II

### PATERNALISM, COMMUNISM AND INDIVIDUALISM

PATERNALISM is defined by the Standard Dictionary as "the claim or attempt on the part of government to control the business or the social and personal affairs of a people after the manner of a father dealing with his children." It is defined by the Century Dictionary as the "excessive governmental regulation of the private affairs and business methods of the people." All governments, with due solicitude for the welfare of the people, must regulate their affairs to some extent. It is specifically "excessive regulation" which is called "paternalism," which is objected to by modern authorities on account of its enervating influence.

The best development of the individual is dependent upon original effort for which an adequate reward is provided. No amount of paternalism can replace this individual effort; all accomplishment is due to it, both separately and collectively. Responsibility and promise of reward are preëminently the factors which lead to effort. Paternalism eliminates the incentive and destroys that initiative without which there is no progress.

The most paternalistic forms of government are

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to be found in communism and the prevailing forms of socialism. Communism aims at community of goods and equality of conditions for all mankind regardless of ability. It attempts artificially to refashion human nature. It means government ownership and operation of all industry. That it does not satisfy the ambition of civilized man is indicated by the successive failures of the scores of communistic organizations formed in the United States and elsewhere during the past century.

Democracy has for its purpose rule by the people, whether direct or through representatives. Direct rule by assembly of the citizens came to grief in ancient Greece. The nearer modern states have approached direct rule, the more distinct has been the failure. The representative or republican form has taken the place of pure democracy. This is the system fashioned by the founders of this nation; the system whose alteration or destruction is being advocated; the system that to-day more than ever is needed in directing the affairs of the nation. Individualism is characteristic of liberal governments in general. It implies commercial competition among free men. It follows, therefore, that the republic should be naturally the least paternalistic of the prevailing forms of government.

Monarchies vary greatly in the amount of their interference with the private affairs of the citizen, and regulation of the industries. The German government, immediately prior to the World War, is a peculiar case. It was notably paternalistic in matters of education and political training of the people. There were many regulations of the details of life

which appeared to us as unwarranted interferences with personal liberty. Yet most remarkable strides were made in the manufacturing industries. This is accounted for by the fact that the government, with the view of increasing national wealth, exerted itself in every way to advance industrial enterprise. It encouraged and stimulated the efforts of the industrial organizations, but did not itself enter the field. Its attitude toward industry was distinct in character from that of the communist. Even this apparent success has been doubted by many and there are authorities to-day who maintain that this overstimulation of German industry by the government presaged disaster and that the knowledge of this possible disaster was one of the moving forces producing the World War. Be that as it may, Germany's material advancement was not accomplished by the adoption of socialism or communism.

Man under stress of disappointment quite naturally seeks a different philosophy, a changed form of government. In this fact we find an explanation of the frequently encountered sentiment for paternalism in government. When drought destroys his crops; when overproduction or foreign competition cuts down the market price of his products; when he finds himself the victim of economic law, man seeks relief by appeal to his government for paternal assistance, forgetting that government is no wiser than the individuals in private life and that it cannot successfully legislate against the operation of economic law. It is the same with the class which considers itself entitled to special privilege; with the visionary theorist who attempts to bring about the

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millennium overnight; with the lazy citizen who desires to live without work. They all turn to paternalism regardless of the ultimate consequences to their fellow men, in the hope that through paternalism they may achieve their desires. To be sure the socialists and communists claim to meet this by impartiality and opposition to special privilege; but when they attempt to regulate wages and prices the result is a dreary level of inefficiency.

Under a paternal form of government, both industrial and agricultural production will fall to low ebb because the reward for labor expended is lacking, and without reward mankind refuses to work. Special advocates will deny this, but the best test is to be found in the pages of history.

Communism has been tersely and truthfully defined as "A common store of wealth to be drawn upon, not in accordance with services rendered, but in response to a human right to sustenance"; socialism as "the collective appropriation of the soil and all of the instruments of production, transportation and distribution." Socialism, the outgrowth of European unrest, has heretofore made but little headway in the United States. That it should still be in evidence in Europe after the disastrous experiments of the last few years seems almost inconceivable. That there should still be in the United States some who advocate this doctrine in the light of European experience would seem unbelievable were it not for their continued outcry.

Under the régime of communistic socialism, the agriculturist will produce only to meet his own needs, the industrialist to meet his, and each will

suffer for the want of the products of the other. Carried to its ultimate analysis, the result would be that the fabric of modern commerce, built upon the increasing wants of mankind, must collapse and we should return to a condition analogous to that of the North American Indian or the pastoral tribes that in past centuries wandered over the Russian steppes.

Paternalism, as here considered, does not include those activities of government that have to do with the protection of the people, with the reëstablishing of violated rights, with the promotion of public welfare through wise legislation or with the abatement of obvious public evil. Such activities, distinctly the function of government, are outside the pale of industrial effort and must of necessity be controlled and directed by government. Attempt of government to control economic forces artificially, in behalf of the people or of some class seeking special privilege, is both vicious and futile.

All Roman legislation, from the great days of the Republic to the fall of the Empire, is only the faithful reproduction of the incurable prejudices of the rulers against labor and the industrial arts. The downfall of the Empire has been laid to many causes, but one as vital as any was probably due to legislation concerning economic affairs, of which the political authority was either ignorant or contemptuous. It was the Emperor Constantine who likened salesmen in shops to women of the town. Toward the end of the Republic economic conditions had become so bad that industry was almost stifled and commercial development was seriously checked. One reason

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was that the capitalists of Rome, because of paternalism, were finding enterprises that paid better and were more attractive than manufacture and trading; for example, speculative farming, which was favored by the senatorial aristocracy and favored accordingly by law. Gibbon points out that the wisest statesman at Rome disapproved of agricultural laws having for their objective paternalistic encouragement of agriculture.

Owing to public clamor, the Licinian Law was passed that specified the maximum portion of the common lands a single individual might hold. In the effort, artificially, to uphold the institution of slavery, it was specifically provided that the number of slaves employed must be proportionate to the number of free men. This limitation of slave labor was undoubtedly for the purpose of preventing decline in the wages paid free labor with the accompanying unrest that would result.

The Agrarian Bill of Tiberius, the Corn Law of Caius Gracchus, provided for the sale of grain below the market price; the extensive building of roads furnished work for the unemployed. If one politician won popularity by giving coin to the electors, another felt it incumbent upon him to supply amusements. Presents of money and clothing were common, and the giving of games at the expense of the state was of almost daily occurrence. Laws were passed fixing the price of meals, restricting the number of guests that might be entertained, and penalties were imposed in the event the cost of entertainment exceeded a stated sum. All such artificial attempts to override economic law failed.

The culmination of this paternalism was the Edict of Diocletian in 301 A.D., which attempted to fix the price, not only for all commodities, but for service as well. This law has come down to us almost intact. Its preamble is a curious mixture of bombast and uneconomic thought and reads as follows:

"For, if the raging avarice, which without regard for mankind increases by leaps and bounds, could be held in check by some regard for moderation, or if the welfare of the people could calmly tolerate this mad license, some ground would appear for concealing the truth. Who is of so hardened a heart and so untouched by feeling for humanity that he can be unaware that in the sale of wares an exorbitant tendency in prices has spread to such an extent that the unbridled desire of plundering is held in check neither by abundance nor by seasons of plenty."

The words might have been used yesterday; in fact, they have been used recently and will be used again to-morrow. Diocletian failed; his paternalistic efforts were barren of useful effort. His scale of fixed prices is one of the greatest curiosities that has come down to us from ancient times.

By such legislation as this the spirit of independence, enterprise and individual effort was paralyzed. More and more the people came to rely upon the government and less and less upon their own effort. Diocletian's idea was that production could be fostered by edict. The result was that children were ordered to remain in their parents' profession; crafts and tenant farming became hereditary. Thus a custom that had been forming since the second century

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A. D. became fixed and what had been a trade or an art became an actual public service. The death penalty was decreed for disobedience, but in spite of this the attempt failed. Tradesmen closed their shops; many articles of commerce disappeared and food riots followed. The law dropped into disuse. Communism could not have been more exacting in binding the individual to the state. One may well pause to think what may be the relationship of paternalism and communism in actual practice.

It is apparent that such legislation tends to stratify a population into castes, and in Rome paternalistic legislation took the precise form of establishing the caste system. Industrial occupations and trades were limited to definite classes in which the aristocracy was forbidden to participate. The Emperor Augustus decreed the death penalty against Senator Ovinus for directing a manufactory. Quintus Claudius had many years before decreed the limitation of cargo space in sea-going vessels to senators, which act, it is just to assume, was one cause for the lack of sea commerce.

In the later Empire increasing efforts at paternalism went hand in hand with political and economic decline. Debasing and general meddling with the currency strikes at the very roots of industrial prosperity, in that the medium of exchange becomes unstable. Activities of this kind in the later years of the Empire were of frequent occurrence. Our own "Greenback Movement," "Free Silver" campaign, the recent outcry against post-war deflation, are modern examples of these ancient and unsound economic tendencies, while the fate that has befallen



the German mark and the Russian ruble is an unforgettable demonstration of this truth to every thinking mind.

In Rome, all who could get it took the bounty of the state and clamored for more. To meet the increasing need of laborers, Claudius, Aurelian and Probus purchased great quantities of barbarian slaves, thus deranging an established economic institution by flooding it with men incapable and dangerous, ignorant of the handicrafts, and who, as agriculturists, secured but the most meager harvests from the earth. Free labor was steadily crowded to the wall. Roman paternalism, which furnished government doles on the one hand and slave competition on the other, resulted usually in one of three things: The oppressed individual migrated to the provinces, took to brigandage, or joined the army.

Byzantium shows similar paternalistic efforts, apparently contemporaneous with the decline of the Byzantine Empire. Examination of the legislation shows all the evils of paternalism that afflicted Rome, and more besides. Under the perpetual intervention of the political authority and its rigid oversight, progress was seriously cramped. Industry had been turned into a series of monopolies thoroughly regulated from top to bottom. Byzantium furnished the precedent for the manifold ideas of repression and regulation to be met with in later years in the history of western political communities.

An edict early in the tenth century furnishes precise knowledge of the decrees in regard to corporate organizations. The grandmaster of corporations was

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Prefect of the City and the direct representative of the Emperor. All industrial activity turned on him: recruiting of labor, election of heads, acts of unions. He oversaw all, and punished all. The public authority was absolute master; it (1) settled the price of raw material and the mode of using it; (2) banned any obnoxious industrial methods; (3) allotted masters' profits and workers' wages; and (4) could impose forfeiture of the right to follow trade.

To carry out the vast amount of work that this paternalistic system entailed, the government had an army of agents, spies, informers. On all trading bodies was imposed the duty of denouncing offences. Penalties were plentiful. It can readily be seen that a top-heavy and constantly expanding bureaucracy was a natural outgrowth of such a situation. *The more a government interferes in production, transportation or distribution, the more nonproducers does it require to carry on this interference, precisely as the more heavily a people is taxed, the more tax-gatherers are required to collect the revenue.*

The Constitutiones Augustales, promulgated by Frederick II in 1231, set forth the principles of the King's economic policy. It was a paternalism wherein the King was to be absolute master of his subjects, watching over their prosperity, deciding what should be for the best interests of all. The royal power was extended, monopolies were reserved, agriculture and internal commerce were regulated, and model farms established. Despite the benevolence of the aim, the result was a frightful despotism.

The government was the privileged shipping firm for the Mediterranean ports, and hindered the departure of vessels not conveying its goods. Under the earlier Normans the public tax levied had been slight, but under Frederick the administrative expenses became burdensome.

Venice affords a somewhat different picture in that the great leaders of industry filled the political offices, led the fleets and the army, conducted the diplomatic negotiations of the state and subordinated government to industrial activity. Trade was largely confined to the great families, the middle class being given trading rights only under severe restriction. This type of industrial supervision of government flourished in Venice for centuries, due in part, perhaps, to the smallness and compactness of the state and to the fact that Venice did not admit her subject peoples to any participation in the government. It was, in fact, a despotism pure and simple. The state-owned fleets were minutely regulated, goods carried in them paying no duties. There was a jealous surveillance of manufactures; an anxiety to guard trade secrets. Competition was crushed out so far as possible. A jealous, narrow spirit reigned among the Venetians themselves, an hostility to all who did not belong to the upper classes.

It was at the end of the Republic that the mistakes of greater days were seen, as indeed this may occur with other and greater nations. Industry suffered from a rigid adherence to trade secrets and the empirical methods of the past which prevented the Venetians from holding their own in competition

with other nations who had availed themselves of scientific discoveries. *It seems axiomatic that in government owned industries, improvements occur more slowly than in private concerns, if they occur at all.*

Following the wreck of the Roman Empire and out of the necessity of the Dark Ages came Feudalism, born of the need for protection to the individual. Baronial castles dotted the landscape of Europe, harbors of refuge in time of strife, for the protection of which the tiller of the soil gladly paid feudal homage. Progressively the centralized state, with the King as overlord, came into existence and, knitting these disunited feudalistic fiefs into the kingdom, the central government unconsciously adopted and perpetuated in large part the practices of the feudal states.

Out of the necessities of the Middle Ages grew the guilds that protected and advanced the interests of the merchants and craftsmen. In addition to protecting the groups as a whole, the guild also attempted to maintain equitable relations among its own members. In the pursuit of this double purpose it was forced to fight for a local monopoly and to pass many regulations as to the manner in which the trade should be conducted. They attempted to control supply, to control the workers, to control the market and, quite naturally, to control prices.

There is little doubt that the guilds were an adequate and satisfactory instrument of the times, just as feudalism was the necessary outgrowth of the conditions which made its development possible. The guilds served a highly useful purpose by protecting

their members, by affording technical training for the workers, and by maintaining high standards of manufacturing, a type of policy that might well be followed by our modern labor unions with advantage to all concerned. But like many other organizations, they outlived their period of usefulness and in time their restrictions and monopolistic tendencies became harmful and obnoxious. The guilds then gradually disappeared, but they did not pass away without leaving their heritage behind them.

Superimposed upon guild restrictions were a multitude of local tolls, fees, fines and the like. The feudal barons levied toll at the bridge; grain must go to the baronial mill, and all with the result that a network of local rules, regulations and customs was spread over Europe, making any general trading almost impossible. Each lord or guild or town attempted by restrictions and tolls to achieve the best interests of those locally concerned.

Briefly, then, during this period there was scarcely a vestige of that freedom of trade which we have come to regard as essential. Analogous conditions in the United States would call for special rules and regulations by each state without any provision for supervision or checking by a central authority, and within the state each county and town would have its own rules of trade. All of these would levy tolls and tariffs as seemed best to fit their own needs. This would produce a condition of commercial chaos which, if it had been operative at any period of our career, would have greatly interfered with our national growth, if it did not completely stifle it.

In England, the Statute of 1261, regulating the

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woolen trade, is perhaps the first notable example of effort at paternalism in English history. This law prohibited all foreign trade in wool, forbade all exportation of the raw product, and also the use of any apparel made out of the country or made at home from foreign wool. Such a law, if it could have been carried out, would have inflicted great hardship on the wool dealers, without benefiting the manufacturers. As a matter of fact, it was not carried out, for it was almost immediately remitted in favor of France and Normandy. While the statute hampered trade, it was powerless to prevent it, the smuggler taking the place of the regular merchants, thus sacrificing the regular traffic for that of the lawbreaker.

Probably the most interesting attempt at industrial regulation was that in England following the Black Death in 1349. The great plague swept away about one-half the population and as a result there was a great scarcity of laborers. It is one of the commonplaces of economics that scarcity tends to increase price, and this was the very natural result at this time. Laborers were scarce and could demand higher wages; hence wages increased.

The landlords and employers became panic-stricken, and as is the wont of human beings, rushed to the government for assistance. As a result of their agitation, we have the first great statute of laborers. This statute served as the basis for nearly all subsequent legislation, of which there was no lack. Between the period of Edward I (1272-1307) and James I (1603-1625), thirty-seven labor acts were passed by Parliament.

The preamble of the first statute states the true economic law of wages very clearly and then proceeds to legislate against it. It reads:

"Because a great part of the people and especially of workmen and servants late died of the pestilence; many seeing the necessity of the masters and great scarcity of servants, will not serve unless they may receive excessive wages. . . . Be it therefore enacted . . . that every man or woman, of whatsoever condition, free or bond, able in body and within the age of three score years; . . . and not having of his own whereof he may live, nor land of his own, about the tillage of which he may occupy himself, and not serving any other, shall be bound to serve the employer who shall require him to do so, and shall take only the wages which were accustomed to be taken in the neighborhood where he is bound to serve. In the twentieth year of the king, and in five or six common years next before."

That is, wages were to be paid on the basis of 1346, in spite of the great scarcity of laborers which had since arisen. A penalty of double the amount given or received was provided if higher than the customary wage was paid.

The legislation was a total failure, but not because of any lack of effort to enforce it. The jurisdiction was transferred from the lord's court to the justices, and for many years after 1351 justices were appointed in every part of England to enforce this law. But the records of their proceedings, as for instance in Somerset in 1360 where hundreds of offenders are named, show that the laborers had no difficulty in obtaining wages higher than the law allowed. Wholesale imprisonment was tried, but this was scarcely a remedy for the scarcity of labor, and the

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small fines which were inflicted did not act as a deterrent. Servants refused to work except at double or treble wages and also developed organizations for information and action to aid them in fleeing from county to county.

The history of legislation of this character in the next two hundred years provides an impressive lesson on the futility of legislation contrary to economic law. As Thorold Rogers points out, the battle between the proprietors and workers ended in complete failure of the law for more than two hundred years, but also it incidentally produced evils of its own. The Act was constantly being modified and reënacted, and always with the same result,—failure. It had the just and inevitable effect of strengthening the hands of all laborers in resistance, and was one of the causes of the Wat Tyler rebellion in 1381.

Other acts, attempting to fix the laborer's pay upon daily basis, omitting pay for holidays, Sundays and the like, were attempted during the reign of Henry IV (1399-1413), until in the reigns of Edward IV (1461-1483) and Richard III (1483-1485), the futility of such legislation was realized. Throughout this long period English laborers were getting high wages and were thriving under their guilds and trade unions in spite of this legislation. These conditions were only changed by the increase in population and the abundance of labor attendant thereon.

We then come to the period of Henry VIII (1509-1547), the most extravagant monarch in English history, whose construction of palaces, gifts to fa-



vorites and endless court debaucheries led eventually to the debasement of the currency. With this came widespread suffering and poverty.

This was the heritage of Queen Elizabeth,—high prices for commodities, low prices for labor, and such universal distress that in 1563 new legislation was attempted. All previous statutes were repealed and a new statute passed which attempted to embody the experience of all the previous Acts, apparently neglecting the monumental fact that legislation cannot abrogate an economic law. The Elizabethan law placed power to fix all rates of wages into the hands of the justices of the peace. It aimed at compelling every servant or artificer to work in the trade to which he was brought up. It placed a penalty on the free movement of labor. Any workman departing from his city, town or parish without a testimonial from his previous employer or some officer, was to be imprisoned until he secured a testimonial; or if he could not do so within the space of twenty-one days, was to be whipped and treated as a vagabond. Much of the misery of the working classes in succeeding generations is attributed to this statute, for instance: an agricultural laborer's income at the end of the seventeenth century had to be supplemented from the poor rate. The object of this celebrated Act was threefold: First, to break up combinations of laborers; second, to supply the adequate machinery of control; and third, to increase the supply of labor by limiting the right of apprenticeship. Intended to eliminate the abuses of previous statutes and to alleviate the conditions of the working people, its effect was exactly contrary and to it is attributed

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much of the pauperization of England in the seventeenth and eighteenth centuries.

*Thus, we have an interesting contrast. In the two hundred years following the original statute of laborers, the working class prospered in spite of legislation which attempted to limit their prosperity. In the later period, following the Elizabethan Statute of Apprenticeship, the reverse was true. Why?* The answer is the same in either case. Economic conditions were such in the early period as to make for prosperity, and legislation served only to hinder, but not to defeat the natural outcome. In the later period, conditions were such as to make for low wages and poverty, and the unwise legislation served not to retard the economic forces, but to aid them.

The English Corn Laws are celebrated in history, the beginning of this restriction dating back as far as the fourteenth century. Commencing with protection to the producer, the Act was modified in 1689 for the benefit of the consumer. With the growth of population toward the close of the eighteenth century, alteration was again necessary. In other words, economic pressure had become too strong to resist. The Napoleonic wars made legislation necessary to increase the home supply. With the declaration of peace in 1815, the landowners who had been prospering saw the end of their prosperity and appealed to paternalism for protection. The result was the famous Corn Law of 1815 prohibiting the importation of grain, except when the price was above eighty shillings a quarter. As a means of maintaining the price, the effort was a failure. The price tendency was persistently downward. As a

device for the support of agriculture, the system failed. Large opportunities for the exchange of English manufactured articles for the foodstuffs of America and the Baltic were ignored. The struggle for the repeal of the corn laws is one of the most interesting in English history. The results of such repeal are shown in the increase in exports from fifty million to one hundred million pounds per annum within five years, while trade developed by leaps and bounds. These laws were but part of a great restrictive system and were repealed when opposition, due to economic pressure, became sufficiently powerful.

Volumes could be written on the effects of government regulation in France during the sixteenth, seventeenth and eighteenth centuries. France, in the early period, was especially plagued by an innumerable variety of local, municipal, guild and baronial tolls and restrictions, which divided the country and which were the outgrowth of feudalism. This policy of local discrimination led to deplorable conditions. The poorest of the people were ruined by the exaction of taxes, the greater part of which never reached the royal treasury. The galleys and prisons were crowded, not with criminals, but with defaulting taxpayers and collectors. With a government virtually bankrupt, a people daily more discontented and impoverished, trade and agriculture prostrate, the time had surely come for drastic reform.

Such was the situation in 1660 under Louis XIV. When Colbert assumed control of the government's policy, he attempted to remedy conditions, to revive trade and to remove the evils, by government regu-

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lation and restriction. In other words, Colbert attempted to substitute national control for local control. There is no doubt that the end desired was justifiable and worthy of any statesman, but there is considerable doubt as to the legitimacy of the means used. In harmony with the dominant theories of the period, Colbert desired to make France self-sufficient in all things. He desired to revive trade and industry. He believed the best method of attaining this end was by government regulation. In pursuit of this end there was given the great edict of 1664, which had many worthy points, in so far as it aimed to suppress the multitude of local duties and to remove other obstacles to trade and industry.

Unfortunately, Colbert added to state aid and patronage state interference. In one of his letters he said: "The only means of rendering our manufactories perfect and of establishing a good system in our commerce is to render them all uniform." He thought that the legislators knew better than the people the requirements of the latter, and that it was necessary by severe rules to train them up on good habits. Therefore, quality and size were fixed by law. What was the result? The manufacturers were well pleased with the subsidies and were eager for more of them; but industry did not develop as expected. As Colbert himself expressed it in 1671, "The merchants never do their best to surmount by their own industry the difficulties which they encounter in their trade, inasmuch as they hope to find an easier means through royal subsidy."

The regulations with respect to the kind and quality of goods did not achieve their end, for it

was found that excellence, or quality, is a relative term and cannot be determined arbitrarily by statute. The official regulations brought only evil results and trade declined. Another reason for this was the cumbrous, inefficient method devised for regulating trade. The trader was supposed to inform the local intendant of his needs. The intendant was then to communicate this to the minister and the minister to lay it before the king in council, where the necessary edict was prepared and sent to the local officials for execution. During this process the merchant lost his trade to the foreigner, or died of old age.

Colbert's method for gaining foreign trade was through the chartered company to which subsidies, bounties and official protection were granted. Duties were placed on foreign vessels trading with France. But in spite of all the official patronage and favoritism every one of the trading companies failed and for a very natural reason, *viz.*, the Dutch were more skilled and were better traders, and had a better knowledge of the market. For this reason they could undersell the French even in their home markets. Add to this the fact that the officials in charge of the companies (largely appointed through court favoritism) often turned embezzlers, and the reason for the failure of Colbert's scheme is plain.

Also, Colbert found that state interference and state patronage implied state guarantee. The manufacturers demanded subsidies and other aids. The workers had an equal claim. If the state fixed the quality and kind of goods that could be produced and the workers obeyed the law, who was respon-

sible if the goods did not find a market? The conclusion is obvious and also weighty from the standpoint of state responsibility. The artificial system of government regulation again broke down before the easy, self-adjusting, flexible system based on private gain and private initiative, for smuggling flourished. The honest manufacturer saw his market taken by the lawbreaker and appealed to the state for protection, but found that the state could do little. The buying public chose to buy where it could buy cheapest, and of the quality it preferred, instead of purchasing the goods made and sold under the arbitrary measures of the government. It is unnecessary to enlarge upon the failure of the system or the evils involved, except to point out that it is the inevitable outcome of an ironclad system of regulation which regards industry as something static rather than the changing dynamic thing it really is. Failure at home, war abroad, such was the result of Colbert's well-meant policy of regulation.

The cumulative effect of the outgrown restrictions of feudalism, the efforts of ministers of Louis XIV, XV and XVI to meet the ever increasing financial demands of the court, brought France to the verge of bankruptcy. One of the impelling motives that caused the wealthy middle class to support the Revolution was the hope that under its régime bankruptcy would be averted, taxes reduced, the paternalistic restrictions removed, and free play given to industrial and agricultural operation. If to the unrest of the wealthy middle class we add the unrest of the peasants and the agricultural popula-

tion due to the restrictions of one kind and another placed upon agriculture, some of them remnants of feudalism, others the exactions of resident agents of the nobility absent at the Court of Versailles, we have the two great currents that made the Revolution possible, both the result of governmental paternalism.

During the period of the French Revolution, from 1789 to the formation of the Consulate in 1802, every experiment in social reformation which we have known by other names during the nineteenth and twentieth centuries was considered, frequently tried and invariably failed. Socialism, communism, anarchy, and all the paternalistic proposals of price-fixing, nationalization and industrial regulation, were tried without success. Disillusioned in their search for Utopia, the people of France turned from the riot of fantastic ideas and set up for themselves again monarchical form of government, the very antithesis of the paternalistic rule that had characterized the decade 1789 to 1799.

Perhaps no more glaring example of the impotence of government in the face of economic law can be offered than that of the aspects of currency inflation during the period of the French Revolution. The government tried every expedient but the right one. It imposed penalties for accepting paper money at less than an arbitrary figure; it tried to force gold and silver into circulation by law and then sought to confiscate them; it decreed the death penalty for trading in foreign securities. It did everything except to stop the issue of paper money. Speculators, corrupt government, the war,—every-

thing was blamed. The real trouble, in the words of an eminent historian, was "tampering with the circulating medium of an entire nation, keeping all values fluctuating, discouraging enterprise, paralyzing energy, undermining sobriety, obliterating thrift, promoting extravagance and exciting riot by the issue of irredeemable currency."

The blighting hand of government in control of industry may also be seen in the history of Spain. At one time all powerful, the first nation of the world, in fact, Spain in a few short years sank to a position of impotence and insignificance. The cause of this decay is easily traceable and has its beginning with the driving out of the Moors and Jews from Spanish territory. There was in Spain a large element in the Catholic Church known as the "Conversos," Jews who had abjured the Jewish faith and become Catholics. Born to trade, inheriting commercial instincts from their ancestors over centuries, the Jews had become the dominant commercial power in Spain, acting as overseers, managers, administrators for the great Spanish nobles who gave their time to warfare and the life of the court. These men came to control Spanish industrial life. Converted to Catholicism, either through conviction or necessity, they rose to possession of power, not only in industry but in the church, until both the clerical and secular grandees of Spain became alarmed at their ascendancy and instigated the prosecution that resulted in one of the great migrations of history.

Left without leaders of experience and wisdom, the commerce of the nation entered upon a period



of decay and decline, and again paternalism was invoked in vain belief that such action could, by artificial means, stay the operation of economic law. Taxes increased until they became so burdensome, as pointed out by one Spanish authority, that a man could actually save money by doing nothing, for the government was taxing him more than he earned if he engaged in industry.

The best example of the Spanish policy is the colonial trade, for the government maintained a strict monopoly of it (for its own benefit) and with the usual results. Trade was restricted to appointed fleets. Ships were not allowed to sail for America according to the convenience of the merchants, but were forced to sail from a given port at a given time with a given fleet, to a given point in America. Unfortunately, the fleet did not sail regularly, and in some years no fleet sailed at all. As a result, while the Spanish merchant lay at home bound with official red tape, foreign smugglers supplied the Spanish markets and reaped the profits. Other examples of restriction might be given, as those against emigration, and the "palmeo," a tax levied according to weight, which taxed Spanish exports out of existence. The conclusion is clear: the Spanish policy stifled Spain's own trade and handed it over to foreign smugglers.

The old Spanish colonial system went to pieces in the eighteenth century, but it was too late then to save Spain. In the year 1748, the fleets were given up entirely and prohibitions on trade between colonies was removed. Even though the prohibition of trade with foreigners was not removed, the effect

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was stupendous, for within ten years the trade and customs duties increased about eightfold. This indicates what might have been possible if Spain had changed her policy earlier.

Paternalistic restriction and interference of government had killed Spanish industry, no matter how worthy the intentions had been which were behind the policy. The most outstanding lesson that may be gained from the Spanish experience is, again, that rigid government control cannot compete with flexible private enterprise. The Spanish colonial policy succeeded only in handing over the colonial markets to the English and Dutch smugglers, who were able to come and go as they pleased.

The restrictive measures in the centuries following the Christian era culminated in the English, French and Spanish efforts at paternalism. In the case of England they were the prime cause leading up to the loss of the American colonies; in the case of France, leading up to the French Revolution, and in the case of Spain to the downfall and decay of that nation from her proud position of world leadership. The results should give pause to our enthusiastic reformers, both in public office and in private life, who blindly set out upon a program of government control of industry, with nationalization of much of it. It emphasizes again the maxim that "Best governed is least governed," and that any nation, if it is to prosper, must exert its maximum effort in giving to the individual maximum freedom of action, provided always and of course that such action is not inimical to national welfare.

Examples may also be cited of the failure of

socialistic or paternalistic enterprises in the New World. Here the experiment of socialism was tried as early as 1607 by the Jamestown Colony. The colonists occupied separate log cabins assigned to them; they tilled the land in common, stored the harvests as common products, and drew their supplies from the common store according to the size of their respective families. The experiment failed, just as all similar efforts have failed, because the incentive of reward in the form of personal advancement was lacking. Then came Captain John Smith, the appointee of King James. He parcelled out the land, gave every man the reward of his efforts, substituted private for public ownership, and history recites that thereafter the colony was prosperous and successful. The "Encyclopedia Britannica," under the heading of communism, cites more than a score of such societies in the United States alone, all of which have ultimately failed.

The history of the Philippines during the past several years affords ample proof of the folly and unwisdom of paternalism. Proudly proclaimed by its sponsors as "the most paternalistic government under the American flag," under the inspiration and direction of the native legislature, it went into business and speculation on a wholesale basis. Government funds were used to buy various commodities at war prices, a railroad was acquired, sugar centrals established, a bank taken over that was used in turn to finance the various ventures. An orgy of corruption, wild speculation and unsound business ventures followed that came within an ace of wrecking Philippine industry and commerce. It was dis-

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covered that the gold reserve was gone and the Philippine peso was going the way of the German mark. Philippine bonds became of dubious value, business stagnated, the country was headed towards financial ruin. It was only the intervention of Washington, the appointment of General Wood and his disciplinary action that averted the crash. Another experiment in paternalism had been tried, another failure recorded, fortunately without the usual train of results, which were avoided only because the United States through General Wood clamped down the lid and put on the brakes.

The experiment and its consequences have aroused no particular interest in the United States for two reasons. First, because the Philippines are remote from the United States and the people have entirely different racial characteristics; second, because the impending conflagration was extinguished promptly and without the usual accompaniments of violence, bloodshed and rapine that are as a rule the ultimate results of misgovernment ending in revolution. The function of the government was obvious. Fortunately for the Philippines, action was sufficiently prompt to avert the débâcle.

The activities of the Non-Partisan League in North Dakota are ample proof of the unwisdom of government entering industry. Starting out with a program of state-owned elevators, state-owned flour mills and a rural credit bank to be operated at cost, the experiment ran the whole gamut of unsound economic adventure. Advocated as a means of reducing taxation and reducing rates of interest, the results have been directly opposite. Taxes have

more than quadrupled, there have been bank scandals, political favoritism, autocratic dictation, and complete failure to attain the alleged objectives that so strongly appealed to the farming community. It is but another proof of the fact that government cannot successfully operate industrially nor can it by legislative mandate stay the operation of economic laws.

The inescapable conclusions to be drawn from these experiences in past centuries may be summed up as follows:

1. When government regulation conflicts with economic forces and economic law, economic law normally wins out, but the legal restrictions may hamper and hinder economic development temporarily or may depress it permanently.
2. Legislation in accordance with or wisely directing economic forces is successful. But past experience shows that the tendency of legislators is to pass crude prohibitions and unwise restrictions instead of wise measures which would be of some advantage.
3. Government restriction acts as an outlet and a retreat for demagogues who find it easier to pass superficial legislation than to recognize conditions as they exist and meet them by well directed laws.
4. Government regulations are often inoperative, but even then their presence on the statute books does harm, for it makes for disrespect of the law.
5. Regulation often causes the very thing which it intends to remedy. The attempt of France in the eighteenth century to protect the consumers by prohibiting the exportation of grain produced the very famine which it was intended to avert.
6. Government interference is a fruitful source of trouble within the nation and outside the nation, for in the past such interference has caused suspicion of government and between governments and

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has been the cause of wars, rebellions and revolutions.

7. Government control even though well meant hampers industry and trade unless very carefully directed. Spain by attempting to control trade to its own benefit stifled it. England by allowing the individual free play captured the world's markets.
8. Government regulation is inflexible and does not respond to the needs of the time. Private enterprise on the other hand is flexible, can be easily shifted and directed, and responds to the demands that arise.
9. Government protection and interference leads inevitably to favoritism and class legislation.
10. People expect too much of government. Government consists merely of ordinary individuals as the people living under it, and they cannot expect more from it than from themselves.
11. It is difficult to define the limits of a policy of extreme interference once it is adopted, for the effect is cumulative and tends to become everything that is connoted by the word "paternalism."
12. Government prohibitions lead to social evils by creating a class of lawbreakers (as smugglers) whose contact and example contaminate whole populations.

## CHAPTER III

### THE RUSSIAN EXPERIMENT

THE rule of the Bolsheviki during the past seven years furnishes a striking example of the disastrous results of communism. It also shows, in a general way, the bad effects of a radical change suddenly undertaken in the form of government, and the evil consequences of blind interference with existing methods of production and distribution of the necessities of life.

Early in 1917, immediately following the bloodless revolution, an attempt was made to establish a rational form of democratic rule. There were many difficulties in the way and the attempt was doomed to failure. In November, 1917, the Bolsheviki, under the shrewd guidance of Lenin and Trotzky, obtained control of the situation and took possession of the government, with Lenin as President of the so-called Republic.

In January, 1918, the Constituent Assembly issued a proclamation declaring all the land within the boundaries of the Russian Republic, together with all mines, forests and waters, to be the property of the nation. All private ownership of such lands, mines, etc., was abolished without compensation. The control and management was declared to be in the hands of the central and local governmental

administrations. The right to use the land was to be acquired and discontinued on the above basis, which meant practically under such conditions as the government should at any time choose to impose.

The land was to be apportioned among the farmers for their occupation and cultivation in the common interest of the people. The farmer was to acquire no title, but only the right of possession at the pleasure of the government. An attempt was made to establish large communistic farms, but these as a rule failed. It is claimed that they produced scarcely enough to feed their employees.

It took some time to accomplish all of this. Great difficulty was encountered in the way of making the distribution of the land satisfactory. Arbitrary methods were resented, unfairness was charged, and there resulted not only resistance to authority but local feuds as well.

When the crops were harvested, armed commissioners were sent out from the cities to appropriate all surplus yield. They left to the farmer only such products as he actually required for his own and his family's sustenance. The result was that the farmer hid whatever he could, and decided to produce in future only that which he actually needed. Consequently, the agricultural production fell to an alarming extent.

Meanwhile, most of the well-to-do people, the aristocrats, the landed proprietors, the capitalists and the bourgeoisie, were driven out of the country as dangerous enemies of the government. About two million such seem to be accounted for. Thousands of others were executed, many without trial



or even a hearing. Despotic rule far worse than under the old régime was the order of the day; detailed accounts picture conditions far more revolting than under the Terror of the French Revolution.

There soon followed the nationalization of the manufacturing establishments and industrial plants in general. The former owners were dispossessed and the management delegated to the workmen. The havoc which resulted is appalling. Inefficiency was the rule, and the average yield of a day's work became a mere fraction of what it had been. Gross mismanagement resulted in the closing of many factories, which were allowed to go to rack and ruin. There was a rapid decline in production. The demoralization of labor was made complete by the shortness of the food supply due to the attitude of the outraged farmers.

The number of government employees enormously increased. This resulted from inefficiency of the governmental administration of industrial affairs, from the system of political control of the soviets, and from the effort to hold dissenting elements in fear and subjection with armed officials. A large proportion of the state employees are said to be incompetent, lazy and corrupt.

Although greatly in the minority, the Bolsheviks managed to retain their power by military force. The red guards, owing to preferential treatment, stood by the government and in times of disturbance held sway by sheer brutality. This could not have been accomplished but for the ignorance and apathy of the peasants and their total lack of organization. This control seems strange to us in face of

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the fact that more than three-quarters of the population are of the peasant or farming class, while the proletariat or industrial class, upon whom the government mainly depends, constitutes but a small minority, the actual Bolsheviki party itself perhaps numbering less than 300,000.

Owing to the closing down of many factories, there was much unemployment and suffering among the workmen. Dissatisfaction was rife. The wages did not suffice owing to the scarcity of food supplies. The peasants had little confidence in the integrity of the government, and wisely refused to take paper money in exchange for their products. More drastic measures were attempted in the farming districts. The peasants, in their exasperation, resisted the authorities and even made war upon neighboring villages. They destroyed much property, including many important agricultural implements. There was a struggle over division of the spoils. The red guards intervened and thousands of peasants were brutally slaughtered. For the purpose of requisitioning the food products of the farms, special troops were mobilized and practically a state of war existed between city and country. Drastic punishment was threatened, and often carried out by the firing squad, for failing to comply with orders. In some of the villages and smaller cities, hundreds of citizens were brutally slain over night. Among the articles and books written by those who claim to be familiar with the facts, there are appalling chronicles of terrorism, oppression, anarchy, corruption and debauchery.

From all this there resulted general demoralization, the farmers refusing to cultivate beyond their

personal needs, the industrial workers becoming discouraged, weakened and apathetic by lack of work and food. Loafing and idleness prevailed; efficiency was nonexistent. Many of the workmen left the cities for the land where they could at least grow food enough to live on. The migration from city to country was marked and persistent.

A matter of great significance and concern to the government was the breakdown of the transportation system. The management of the railways was inefficient, the employees incompetent and dilatory, the shops lacking in skilled or willing workers. A great part of the rolling-stock was allowed to go to ruin. There was even an insufficient production of coal to supply the locomotives which remained.

Then occurred a crisis in the food supply, due not alone to shortage in farm products, but to lack of transport facility as well. Famine was threatened to a great part of the population, and many were in a state of starvation. Millions of the Russian people were saved from starvation only through the activities of foreign nations in distributing food supplies. The United States was notably active in this respect. And all this in face of the fact that Russia is one of the richest countries in the world agriculturally and was at the very time of this starvation exporting for government account food products wrung by force from the farmers. The government became alarmed at the consequences of the experiment which it had imposed upon the people. In January, 1919, Lenin said: "The crisis in food supplies, aggravated by the breakdown of transportation, explains the terrible situation that confronts us. At Petrograd the con-

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dition of transportation service is desperate. The rolling-stock is unusable." This is no actual admission of failure of his experiment in communism, but a little later on some of the government officials and official organs (accredited newspapers) began to complain of results and advocate a return to piece-work, bonuses for special efficiency, calling in the aid of capital, etc. They began to object to the equalization of pay, and majority rule in the management of the factories; the tide of opposition to communism was rapidly rising.

As early as March, 1919, the government began to yield somewhat to popular demand. Piece work and the payment of premiums began to take the place of day labor and uniform wages; but there were too many obstacles in the way of success, notably the scarcity of skilled labor and the condition of the transport system. At the beginning of 1920, it is stated, many workers of the proletariat, in mass meeting, were demanding a return to free and unrestricted commerce. Still the conditions were no better.

John Spargo, authority on socialism, in his work entitled "The Greatest Failure in All History," quotes the *Pravda* of January 3, 1920, the official organ of the Communist Party, as saying: "We must not forget that hitherto we have been living on the stores and machinery, the means of production, which we inherited from the bourgeoisie. We have been using the old stores of raw material, half manufactured and manufactured goods. But these stores are getting exhausted and the machinery is wearing out more and more." On page 307 of the

same book, we find this severe indictment of Bolshevism: "Promising plenty, it gives only famine; promising freedom, it gives only fetters; promising love, it gives only hate; promising order, it gives only chaos; promising righteous and just government, it gives only corrupt despotism; promising fraternity, it gives only fratricide."

The various authorities consulted are in the main antagonistic to the Bolshevik régime, but even the socialistic investigators, while offering excuses, admit the semistarvation, the poor health and the ragged condition of the clothing of the people, the bad sanitation, the political corruption and the general breakdown of the industries and the transport system. They compliment the government upon the effort made to educate and care for the children, and to promote the welfare and happiness of the proletariat element which is loyal to the state. These constitute the new bourgeoisie. They are specially favored in the matter of housing, occupying as they do the former dwellings of the bourgeoisie. They have, in short, through violence, appropriated without compensation the property of others. There is grim humor in this praise of the government for making its protégés comfortable in the quarters of political opponents whom it had murdered, robbed, and driven out of the country.

This brings us up to and including 1920. Since that time the most notable event was on April 4, 1921, when Lenin, addressing the representatives of the Moscow Communist Organizations, said: "There is no other way of bringing the peasantry to perform their work for the state than by modifying the

Rasvyortska (equal division of corn products), that is, changing it to a fixed levy. . . . Only the prospect of being able to dispose himself of his surplus production will inspire the peasant to work his hardest. The state expects that in exchange for this concession the peasant will intensify his activity, and that from this will result the resurrection of small local industries; for the situation does not as yet permit us to speak of great industries." This is complete surrender of the cardinal principle of communism, and recognition and acknowledgment of the great fundamental truth that individual effort can be stimulated only through individual reward. In other words, out of the welter of the Russian débâcle, individualism has risen triumphant.

The right of private ownership of the products of their labor was given not only to the peasants but to those engaged in the small industries. It is said that the peasants had previously been promised life-long occupation of the ground allotted to them. This resulted in a renewal of hope and energy, and some improvement in production, but the optimism was short lived as it was soon realized that the breakdown of the transport system made a satisfactory exchange of products impossible. Cure for this was attempted through the extension of the bonus and piece-work system, which gradually led to better service in the shops and a partial restoration of the capacity of the railroads. Foreign capital has been sought to help restore production, under promises of various sorts, and some improvement has been brought about in the last year or two. The progress, however, is very slow, and it will doubtless take

many years to restore normal conditions: but it is noteworthy that this progress comes only with the increasing recognition of the right to individual ownership of property—that to every man shall belong the fruits of his labor.

The following statements from the files of the *Economic Review*, of London, will serve to give some idea of the effects of the Revolution and the Bolshevik régime:

The coal production held up fairly well to the end of 1917, *i.e.*, to the time of the Bolshevik accession, but dropped in 1918 to one-third of the pre-war yield, and later to one-quarter. It has since increased to about one-third of normal.

About the same may be said of the oil production, excepting that the drop was not quite so abrupt in 1918. It fell to about 40 per cent of the pre-war yield and has since increased to about 50 per cent.

The production of iron fell to about two per cent of the pre-war figure, and the yield of other minerals has been from one per cent to 25 per cent.

The agricultural areas under cultivation decreased by one-third, with late signs of revival. Such products as flax, hemp, tobacco and sugar, were reduced by amounts varying from 50 per cent to 99 per cent.

The number of railway locomotives in commission held out fairly well until about the end of 1917, when it fell swiftly to about one-quarter of the pre-war number, and so remained until a year or more since, when the number was increased somewhat. The fall was due in part to the misfortunes of war. The slowness of the progress since that time is plainly due to the inefficiency and shortage of skilled

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labor, the latter having been driven out by the lack of reward for efficient effort.

Whatever promise there seems to be for revival, calls for further renunciation of the cardinal principles of communism; for the further establishment of individual independence and ownership of the products of labor, for more piece work and extension of the bonus system as a reward for efficiency, and for a return of capitalistic enterprise. The proletarian has had his trial at loafing on the job, with the expectation of being fed by the peasant. He has found out that it leads to starvation.

Such is the result of the Bolshevik experiment in socialistic communism,—a dreary picture of disaster, starvation and destruction,—a ghastly but complete refutation of the doctrine that through communism will humanity find happiness.



## CHAPTER IV

### PRESENT-DAY CONDITIONS IN THE UNITED STATES

IN the light of the development of modern civilization, with all that it connotes of scientific and industrial advancement, with our mounting population and all of the complexities arising therefrom, must not the relation of government to industry assume an entirely different phase than in past centuries? Must not this relationship be predicated upon the growth and intricacies of industry, and must not government in its development keep abreast of modern scientific achievements?

Broad fundamentals of government that were recognized by the founders of this nation as having to do with protection of life and property and the right to the pursuit of happiness, must remain unchanged. The details of the government's regulation of our activities must of necessity be changed from time to time if they are to be kept in harmony with industrial advancement.

In order to obtain an intelligent understanding of the proper relation between government and industry, there is required a review of its past history, of the factors leading up to the conditions of to-day, and of the vast changes that have occurred since the

founding of this nation. A proper relation, founded upon scientific principles, free from political hysteria and unswayed by irrational demands, is more important to-day than at any time in our national life.

Fundamentally the functions of government and industry are distinct, and the attempt of either to invade the field of the other can end only in great injury to the state. It is plain that the relationship must undergo change, but this fact does not in the least reflect upon the sound character of the principles enunciated in our Declaration of Independence and our Constitution. In fact, the truth and soundness of those fundamentals of representative republican government become more and more obvious with the lapse of time. The necessity for their observance becomes greater and greater as the years progress, as the country becomes more densely peopled, as our public lands disappear and as our industrial life becomes more and more complex.

We are, in fact, living an entirely new type of community and rural life. We have become in large measure rooted to our immediate environment. Conditions no longer permit free exercise of that inherent spirit of nomadic wandering which lured our ancestors from the Atlantic seaboard into the Western Reserve; from the Western Reserve to the Great Lakes; from the Mississippi Valley on across the great prairies and over the crest of the Rocky Mountains, over the great inland plateau, up from the Rio Grande to the Columbia and across the Sierras out of the inhospitable deserts into the sunshine and flowers of California. That spirit of

adventure to-day finds no outlet, not because human nature has changed, not because we do not want to emulate pioneers who, beginning with Columbus, discovered new continents and encircled the globe, but because there no longer exist throughout the world great unexplored areas, or in the United States the vast expanse of free land once to be had for the taking.

The pastoral life of a century or more ago has given place to urban life with its highly developed industrialism. The life of this nation has been contemporaneous with the era of the world's industrial progress, and because of industrialism the population of our cities has grown more rapidly than that of the country. The relative proportion of city to rural population in 1820 was 4.9 per cent urban, 95.1 per cent rural. In 1920 the ratio was 51.4 per cent urban and 48.6 per cent rural, with the tendency towards increase in urban population still acutely manifest.

The period of the Civil War marked the beginning of a new nationalism. Industry, always active in time of war, was spurred to still greater effort. With peace came the period of reconstruction, with innumerable problems demanding immediate solution. We had been face to face with national disintegration. We had seen our financial system totter; the possible submergence of our life as a nation had been continually before us during the period of the Civil War. All the multifarious problems that grew out of that fratricidal struggle we met and conquered, but in so doing we inaugurated a new era in our national existence. As part of the penalty of

war, with its attendant period of convalescence and unrest, we ran the gamut of human discontent as typified by the Ku Klux Klan, Molly McGuires, the Granger, Populist, Greenback, Free Silver and similar movements. Fortunately, during that post-war period, we had the undeveloped West as a safety valve through which our national discontent could escape.

Needing to-day, perhaps more than ever, some sort of a safety valve, we find that the undeveloped West has vanished. We must seek other means of allaying unrest. The only course promising success seems to be in the direction of teaching the people the fundamentals of sound economic thought, and making our government in its relation to industry thoroughly efficient. Teaching sound principles of economics in our schools is of fundamental importance. Successfully carried out, this will lead to the general recognition of the fact that paternalism, with its train of nationalization and communism, must inevitably be highly detrimental to the interests of the entire community. Once establish this conception in the public mind, and the problems of government and industry are comparatively simple of solution.

In the latter part of the nineteenth century there came a realization that our apparently limitless natural resources in reality had their limitations and that the time was approaching when definite action must be taken to conserve those resources which were threatened with exhaustion. Special privileges created by untrammelled individualism had grown into consolidations that challenged the very

foundations of government. It was this awakening consciousness, brought about by industrial evolution, that precipitated the struggle.

During the period from 1870 to 1890, we gave free and untrammelled play to the economic forces that made for great aggregations of capital; taxes were low, there was room for all. Out of this period we emerged into the era of industrial advancement that has marked our national life since that time. We found that old tools no longer sufficed; we were quick to forge new ones. Our railroad systems multiplied with amazing rapidity. Our manufactories increased and expanded in an effort to meet the growing national demand. This was followed by consolidations in an effort to eliminate the destructive features of unlimited competition, which could only lead to the survival of the most powerful. Petroleum had been discovered; its exploitation was gaining impetus, with all of its possibilities. Our national resources had passed, in large degree, into private ownerships, which were consolidated into greater and greater holdings, until little by little we awoke to the realization that our very freedom of industrial effort had been productive of abuses needing correction. We were confronted with railroad rebates and other special privileges. Piratical industrial competition engineered by individuals of low morality set industrial standards which we came in time to understand must be eradicated.

The rise of industrialism is typified in the great aggregations of capital known as trusts. To many people, trusts appeared as menacing not only to American individualism but to the very fabric and

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theory of our government. The time was at hand for a new relation between government and consolidated industry. That relationship is yet to be worked out to a satisfactory conclusion. That the legislation so far enacted has been in large part blundering, unsound, and unfitted to the needs of the occasion, is simply an example of history repeating itself.

Nothing can be of greater importance than sharp differentiation between American individualism as practiced by the industrialists of one hundred years ago, or by single individuals and comparatively small corporations of to-day, on the one hand, and the practices of our great public service corporations with their enormous aggregations of capital on the other hand. Representatives of the former type as single units can have no great national significance; are in no sense public enterprises, and in no way control the distribution of essential products. Representatives of the latter type, in sharp distinction, best serve the public need as monopolies and perform a service essential to the welfare of the public. The very magnitude of their operations makes them a public necessity; their power to control distribution of public necessities is so effective that regulation by government in behalf of public welfare is essential. Submission to this regulation is the price paid by aggregated capital for monopolistic control of things essential to the people.

Regulation and limitation of the activity of the great corporations is an entirely different thing from regulation of the individual or the small corporation which is of little national significance. Individual

activity and the activity of small corporations should be as free and untrammelled to-day as at any time. The great aggregations of capital may well be subjected to certain definite governmental rules and regulations, provided always that these rules and regulations are in behalf of public welfare and that government in such regulatory capacity does not attempt to enter the field of industrial operations.

There is a vital difference between justifiable government regulation on behalf of the people and governmental operation. The former, properly conducted, is essential to modern civilization; the latter finds no justification in past experiments. History shows that government operation leads to disaster. Modern community life has become so dependent upon our so-called public utility corporations serving us with gas, electricity, water, telephones and transportation, that these things have become public necessities. It is the plain duty of government to see that unfair advantage of this dependence is not taken by the corporations, and to insist that they be so conducted as to render ample and satisfactory service at reasonable remuneration. Efficiency in capital expenditure and efficiency in operation should both be insisted upon to the end that the public may receive the most satisfactory service at the lowest possible cost, at the same time allowing a rate of interest sufficiently attractive to make the necessary capital available for improvements.

The enactment of the Sherman Anti-trust Law in 1890 was symptomatic of an awakening national

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consciousness of the necessity for this differentiation between freedom of enormous aggregations of capital and freedom of the individual. The struggle for supremacy between government and industry as typified by the Sherman Anti-trust Law, also found further expression in the creation of the Interstate Commerce Commission, the Federal Trade Commission, and similar bodies. As a result of this struggle, the whole spirit of government in its relation to industry became punitive. Popular clamor, demanding dispersal of capitalistic aggregations, became insistent. The spirit of American individualism, aroused to the consciousness that its submergence was threatened by cumulative corporate activity, flamed into open warfare. The spirit of government, evidenced by its legislation, ceased to be purely regulatory, which alone is its proper function, and became destructive and punitive. As is usually the case in times of national hysteria and unrest, irresponsible politicians capitalized for their own aggrandizement the trend of public opinion. Oratorical outbursts were frequent. They had for their objective the arousing of class prejudice; facts were misstated; the truth distorted; unwise, vicious and unsound legislation was proposed for the purpose of catching votes. The pendulum swung to the extreme and we were confronted with a period of anti-industrial legislation, the full significance and futility of much of which was to be revealed only during the period of the World War. There were, of course, evils that needed correction. The ruthless competition of the great aggregations of capital took the form of eliminating local competition by



slashing prices in one area of the United States, while maintaining or raising them in others. The helplessness of the individual or small corporation confined to a single area is obvious; the remedy is of course equally obvious. It was and is essentially the function of government to prevent such unfair competition; to protect the individual in his right of property.

Unconsciously, we were setting another milestone in our industrial life which was to mark the definite understanding that government was supreme and that industry might not arrogate to itself functions inimical to the public welfare. We had not yet come to realize that service to the public is the prime justification for corporate existence, and that when service becomes purely selfish and looks only to corporate welfare, regardless of public welfare, discipline must inevitably be applied. It has been difficult for the executives of many of our great corporations to realize this fundamental principle. Some of them still fail to grasp it, and to the extent that this realization is lacking, just to that extent will turmoil and strife continue. Individuals were forced to collective bargaining as a matter of self-protection; the public has been forced to take cognizance of industrial unification for a similar reason. It will not forget, or permit a return to, conditions existing prior to and after the passage of the Sherman Anti-trust Law. The chauvinists who cling to the old theories have no place in industrial activity. They are detrimental to the corporations which they serve; they are in considerable measure responsible for the public hostility towards corporations. For

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them must be substituted far-seeing executives who realize that the public welfare is paramount and that the test of their administration rests not only in dividends satisfactory to the stockholders, but equally in service satisfactory to the public. They must, from a standpoint of self-preservation, establish harmonious relations between the public and the corporations. This can be done only through satisfactory service at reasonable rates.

The path of industrial regulation that we were beginning to tread was and is a dangerous one, in so far as it may lead in the direction of nationalization of industry, which is more to be feared than the ills sought to be remedied. The situation, however, was inevitable; it was part of the evolution of the nation and of modern civilization, and could not have been avoided. The great question which arises at this parting of the ways between absolutely untrammelled effort and government supervision is whether we shall move intelligently and constructively or unwisely and destructively. It is certain that we must move. Continuance of the old conditions is no longer possible. We shall have gone far in setting our feet in the right direction if we keep clearly before us the understanding that it is no part of the function of government to attempt industrial operation. This is the great fundamental,—the foundation upon which all government regulation must be built,—failing which, the structure will have been erected upon a foundation of sand and will eventually collapse.

Some of us have come to think that could we but put government in possession of industry, Utopia

would be at hand. Many of the most rabid reformers hope to create specially privileged classes of employment for themselves; to increase wages and decrease hours of labor; to fix for themselves the conditions of their employment; to tax the few for the benefit of the many, and, in short, to create a paternalistic state that would function solely in their interests without regard to the hopes and ambitions of their neighbors. As railway workers we have tasted the sweets of government operation; we have discovered that a wish for increased wages and shortened hours could be quickly translated into realization by the threat of the mailed fist, and some of us apparently want more of such control, forgetting that there is always a day of reckoning and that no structure can long endure which is built upon unsound economic principles or which creates special privileges for one class to the detriment of others.

Some of us have been elected to Congress as Republicans or as Democrats, and promptly decried party rule and scorned party allegiance, setting up for ourselves blocs whose purpose seems to be special privilege for special classes, entirely disregarding the obvious fact that through party government alone can we hope to secure necessary legislation. We ignore the patent fact that it is impossible to treat separately any segment of the industrial and agricultural circle without producing a marked effect upon the remainder. Industrially we attempt special legislation beneficial to our urban population, while agriculturally we demand the fixing of prices for farm products and a guarantee of such prices by the government, without the slightest regard to the

immutable law of supply and demand. We demand a living wage with but slight conception of its meaning, and at the same time we entirely ignore the painful truth that the national income is insufficient to meet the demands.

We disregard economic principles, and turn a willing ear to demagogic harangues, forgetting that it is only through work that we can supply our wants, and that the greater our wants the harder must we work in order to gratify them. Some of us seem childishly credulous in our belief that if government would but commandeer industry each one of us might live in ease and comparative opulence, forgetting that the growing demands of modern civilization can be met only by increased production. To accomplish this we must substitute machine labor for manual labor to a greater degree than ever before, yet in many directions there is a continual effort to limit the output per man. We must eliminate waste, standardize practice, and create, wherever possible, the simplest forms of industrial procedure, if we are in any degree to balance our demands against our ability to produce and supply. As part of the great illusion that we may live without work, some of us demand the nationalization of the railways, the coal mines, the oil wells, all minerals, and even the soil itself, under the incomprehensible theory that such nationalization and governmental operation would make possible a higher plane of existence with less individual effort. The exact opposite would be the inevitable result of such procedure.

There has been, perhaps, no more exhaustive

examination of this subject of private vs. public ownership than is contained in the report of the National Civic Federation, dealing with the operation of the public utilities of the United States and Great Britain. Organized in 1905, this committee of twenty-one members<sup>1</sup> was composed of some of the most eminent citizens of the United States. It was divided into three groups: the "pros," the "antis," and the "neutrals." Until this committee made its investigation there had been no really serious effort made at an impartial report covering the question of private or public operation of public utilities. This investigation was undertaken in September, 1905, the committee examining the operation of gas, electric light, water, power and street railway

<sup>1</sup> The members were: Melville E. Ingalls, Chairman (Chairman Board of Directors, Big Four Railroad), Cincinnati; Albert Shaw, Vice-Chairman (Editor *Review of Reviews*), New York; Talcott Williams (Editorial writer, *The Press*), Philadelphia; Frank J. Goodnow (Columbia University), New York; Walton Clark (Third Vice-President, United Gas Improvement Company), Philadelphia; W. D. Mahon (President, Association Street Railway Employees), Detroit; Edward W. Bemis (Superintendent Water Works), Cleveland; John H. Gray (University of Minnesota), Minneapolis; Walter L. Fisher (Special Traction Counsel for City of Chicago and Ex-President Municipal Voters' League), Chicago; Timothy Healy (President International Brotherhood Stationary Firemen), New York; H. B. F. McFarland (President, Board of Commissioners, District of Columbia), Washington, D. C.; Daniel J. Keefe (President International Longshoremen's Association), Detroit; Frank Parsons (President National Public Ownership League), Boston; John R. Commons (University of Wisconsin), Madison; J. W. Sullivan (Editor, *Clothing Trades' Bulletin*), New York; F. J. McNulty (President International Brotherhood of Electric Workers), Washington; Albert E. Winchester (General Superintendent, City of S. Norwalk Electric Works), S. Norwalk, Conn.; Charles L. Edgar (President, The Edison Electric and Illuminating Company), Boston; Milo R. Maltbie (Member of the Public Service Commission), New York; Leo S. Rowe (University of Pennsylvania), Philadelphia, resigned May 21, 1906, and succeeded by Edward A. Moffett, Secretary (Editor *Bricklayer and Mason*), Indianapolis, Ind.

companies. The report of the committee was published in 1907, and from its findings the following extracts are presented:

"First, we wish to emphasize the fact that the public utilities studied are so constituted that it is impossible for them to be regulated by competition. Therefore, they must be controlled and regulated by the government; or they must be left to do as they please; or they must be operated by the public. There is no other course. None of us is in favor of leaving them to their own will, and the question is whether it is better to regulate or to operate."

This statement of the committee, comprised as it was of three distinct factions, is commended to the consideration of the reactionary element which, entirely regardless of the trend of the times, of the evolution that is taking place, would revert to the old uncontrolled relationship under which public utilities were free to work their will, and under which piratically inclined financiers were free to construct competing systems or to start destructive rate wars solely for the purpose of selling out, at a profit, to the already existing corporation. This type of piracy has been perpetrated over and over again, and always to the detriment of the public who, in the last analysis, pays the bill through increased rates. It has come to be recognized that in some things, from the standpoint of public welfare, monopoly is desirable, the telephone being perhaps the most outstanding example.

The report continues as follows:

"We are of the opinion that a public utility which concerns the health of the citizens should not be left to

individuals, where the temptation of profit might produce disastrous results, and therefore it is our judgment that undertakings in which the sanitary motive largely enters should be operated by the public."

This obviously covers the operation of sewage systems and water supply. Whether the water for our cities can be more satisfactorily developed and distributed by public effort than by private effort is a debatable question. Justification for public operation may be covered by the statement that where public health is involved the question of expense must be secondary.

Continuing again, the report says:

"Our investigations teach us that no municipal operation is likely to be highly successful that does not provide for:

First —An executive manager with full responsibility, holding his position during good behavior.

Second—Exclusion of political influence and personal favoritism from the management of the undertaking.

Third —Separation of the finances of the undertaking from those of the rest of the city."

It has been, and still is, a popular pastime with our politicians to heave brickbats at public utility corporations in the expectation of being applauded by the assembled multitude. Corporation baiting has been, and in many places still is, regarded as the surest road to political success. This condition, with its attendant corruption, blackmail, graft and debauchery, became so appalling and unsatisfactory that many states created public service commissions

in sheer defense not only of the consuming public from the rapacity of the corporation, but equally as a defense of the corporation against alleged patriots serving their fellow citizens in public capacity, but with an eye single to personal profit regardless of the method used. It became the duty of these commissions to fix such rates for public service corporations as would return adequate compensation and permit of necessary expansion. This has been a tremendous step forward from the old political control that was so prolific of graft and corruption. That it has not the better succeeded has been in large part due to the refusal of the public to select competent men for the positions or to accept in good part the decisions arrived at after expert investigation and examination.

Until the above mentioned fundamentals outlined by the National Civic Federation Committee are complied with, until centralized responsibility with authority, separated from political influence, is recognized as a prerequisite to success, we need not expect any material public benefit from public operation of public utilities. On the contrary we can, with considerable assurance, look upon such activities as certain to produce a more unsatisfactory type of service, coupled with municipal graft and corruption.

The report continues as follows:

"We wish to bring to your consideration the danger here in the United States of turning over these public utilities to the present government of some of our cities. Some, we know, are well governed and the situation on the whole seems to be improving, but they are not up



to the government of British cities. We found in England and Scotland a high type of municipal government which is the result of many years of struggle and improvement. Business men seem to take a pride in serving as city councilors or aldermen, and the government of such cities as Glasgow, Manchester, Birmingham and others includes many of the best citizens of the city. These conditions are distinctly favorable to municipal operation."

Contrasting with this our own municipal conditions, it is not difficult to visualize the distance we have yet to travel before the government of our municipalities may be compared favorably with that of Great Britain. Our advocates of public operation totally ignore these simple and vital fundamentals in their clamor for public ownership. The structure that they propose to erect obviously can have neither permanence nor stability, if built upon the unstable foundation of our present system of tenure in political office, political favoritism or the demands of fancied political necessity.

It is true that we have recognized the difficulty and have attempted to obviate it under the city manager plan of government, now in effect in some three hundred and twenty-five American cities, but we have yet far to go in the education of our citizens in loyal support of such a program. No form of organization, however inherently excellent it may be, can succeed that does not have unquestioned and loyal public support.

Much of this unsatisfactory condition has been brought about by the unwillingness of our so-called leading citizens to accept or perform the obligations of public service that is imposed by our form of

government. Accepting with alacrity, and as a matter of God-given right, the protection afforded by the laws of our nation and our states, availing themselves to the fullest extent of the opportunities for a successful career, spending extravagantly of their time and money in gratification of their own pleasures, they look upon public service as something to be performed by the political hack and consider their obligation fulfilled with a donation to the campaign fund of as little as one-twentieth of one per cent of their annual income. This is subversive of good government. The state should have the right, and should exercise the right, to draft some of these men for public service in time of peace just as they draft the younger men in time of war. The theory that men of brains, of ability, of high moral character, are immune to the call of public service, must be abandoned, and for it there must be substituted the realization that public service is the highest type of reward, the crowning glory of every successful career. This condition is, however, dependent upon *all* classes of citizens, realizing the necessity for securing some portion of the active years of our ablest citizens to be devoted to public service as repayment for the privilege of living under our republican form of government.

The committee recognized the danger of creating a political oligarchy that would, through its organization, control political elections. Again we confront one of the serious problems of public ownership and operation. If we are to increase the number of public servants, if we are to permit them political activity, we must face inevitably the possible

consequence of the domination of our political elections by such organization. The danger has been recognized in Great Britain, and J. W. Sullivan, in his able report to the National Civic Federation, says:

"Great Britain's present municipal political conditions have brought about a discussion of the disfranchisement of municipal employees. Sir John Ure Primrose, recent Lord Provost of Glasgow, who presided at one of the meetings attended by our committee, said on a previous occasion: 'We have reached a point where we begin to see danger ahead, and this, from what I know of your peculiar political system, is likely to be more threatening to you than to us. This arises out of the building up of a great army of municipal employees.' E. O. Smith, town clerk of Birmingham since 1881, testified before a parliamentary committee: 'I should like to see all corporate employees disfranchised.' Sir Thomas Hughes, alderman since 1878, except during his two terms as mayor, said to the same committee: 'I have known an instance where combination was the occasion of a very good man being thrown out of his position as councillor simply because they thought he did not favor the municipal employees. I should gladly welcome disfranchisement' Manager Dalrymple, of the Glasgow tramways, through conscientious scruples, does not vote. He favors disfranchising public servants, and does not permit tramway employees to take part in municipal politics beyond voting. Lord Stanley, when postmaster general, tried to have Parliament pass a bill disfranchising postmen. He failed of reelection, and the organized postmen speak of having finished his career, unaware that in this boast they apprise the lay citizen of the postmen's adhesion to a bureaucracy apart from the community, with interests of its own."

The blunt truth is that we are already approaching a condition in the United States where this ques-

tion must receive public consideration. We have leagues of municipalities largely engineered by municipal officials, teachers' associations, policemen's associations, associations of public officials of almost every kind, all, perhaps, with intent of laudable public advancement, but certainly intent upon advancing the interests of their own groups.

Such organizations may attempt to override the law, as witness the Boston police strike, one of the most flagrant exhibitions of lawlessness on the part of public officials in our history. In California there are more than 212,000 public servants, and an additional 35,000 servants of the national government, a group approximating 250,000 in a population of some four million,—one in every sixteen; a ratio somewhat above the average for the entire United States. This may be compared with the ratio of one in eighty in the administration of Abraham Lincoln.

The report of the committee of the National Civic Federation made the very significant statement:

"To carry out these recommendations effectively and to protect the rights of the people, we recommend that the various states should give to their municipalities the authority, upon popular vote under reasonable regulations, to build and operate public utilities or to build and lease the same, or to take over works already constructed. In no other way can the people be put upon a fair trading basis and obtain from the individual companies such rights as they ought to have. We believe that this provision will tend to make it to the enlightened self-interest of the public utility companies to furnish adequate service upon fair terms, and to this extent will tend to render it unnecessary for the public to take over the existing utilities or to acquire new ones."

In other words, these men, some of whom were avowedly in favor of public ownership and operation, and some who were neutral, agreed after investigation that it was not desirable to have public ownership provided private ownership rendered the required service at reasonable cost.

The report of the Civic Association above referred to still stands as the most complete investigation yet undertaken. The conclusions are significant, especially those relating to the suggestion that municipalities be given the power to operate public utilities, not with the expectation that they would do so, but purely as a trading proposition, putting the municipalities in a position to make satisfactory bargains with privately owned and operated public utilities.

The whole fabric of the relation of government to industry is contained in this suggestion. Briefly stated, it is that government should confine itself to the true functions of government; that it should not infringe upon the domain of industry; that it should so limit and control the functions of industry in those things that may be called public utilities or necessities as to safeguard the interests of the public to the end that they may obtain the greatest service at the least price feasible.

Industry should be left free to organize, to operate and to control its activities within definite and agreed limitations. Industry has no more justification for infringing upon the domain of government than has government for infringing upon the domain of industry. Each discharges a separate and distinct public service that will be the better performed if

the line of demarcation is clean cut and thoroughly understood by the public. If corporations serve a public necessity and are under government supervision, it follows that such supervision carries with it an implied obligation so to regulate rates as to allow the corporations to secure capital at the lowest possible rate of interest. This, in turn, carries with it the very definite implication that such earnings will be sanctioned as to enable the corporation to pay not only the interest on its borrowed capital in the form of bonds, but a reasonable dividend upon its stock as well.

Public utility corporations, notably railroad, electric light, power, water and telephone companies, best serve the public when in monopolistic control of the service rendered. Monopolistic control, of course, carries with it again the implication of government supervision. It is evident that we should not permit combinations monopolistic in character to charge "all the traffic will bear."

We are coming to recognize that competition among public utilities is not desirable; but, again, with the restriction of such competition comes necessity for supervision which takes the form of public utility commissions, supervising the fixing of rates and similar activities of the corporations. It has been said in criticism of such public supervision and regulation, that the incentive for efficient management is lacking in that the commissions are bound to allow reasonable rates based upon the capital investment without regard to the efficiency of expenditure. The criticism hardly merits discussion, since with a proper personnel of the public service

commission they can and do scrutinize the investments and allow credit only for a reasonable cost.

It is an easy thing to criticize the members of the state public service commissions, railroad commissions and the like. A little knowledge is a dangerous thing, and sufficient knowledge to criticize intelligently the findings of such bodies could as a rule be based only on an investigation and study that the average citizen cannot possibly give to the subject. It follows, therefore, that we must be content to accept decisions of those we place in authority. We have always the right to replace the appointees with others, but dismissal solely because rates may have been advanced or not reduced according to our liking is destructive of the purpose of government. It is apparent that such bodies should be appointive rather than elective. In electing their public servants, the people take little heed of personal fitness for office. If such commissions are to function satisfactorily, it is imperative that their members should be thoroughly competent for the task, and removed, so far as possible, from the whirlpool of politics. Constructive suggestion is difficult; it requires as prerequisite intimate knowledge of the subject that few citizens possess. It follows, therefore, that we have more frequently to combat destructive, unintelligent and uninformed criticism. It goes without saying that an inefficient, dishonest or unintelligent public servant should be removed from public office. Equally it is true that the citizens should be sure that the official is unintelligent, dishonest, or inefficient.

Theodore Roosevelt, in a letter to John Eshelman,

the then Chairman of the California Railway Commission, recognized the significance of this situation and wrote him, in part, as follows:

"Your first task will be easy. Elected as you will be under a movement responsive to the people and independent of the corporations, you will find it easy to reduce rates where they are too high, and you will find many rates are too high. Your real task will come later when you have to do justice to the corporations and raise rates in spite of the popular clamor to lower them. The test of public regulation will be the ability of public men to do that and to maintain popular confidence in doing it."

This letter was quoted in a communication under date of February 10, 1922, from the Railway Commission of the State of California to the Governor of the State of California. The letter was inspired by a demand from the Governor upon the Commission that they should "examine, and reëxamine, and then examine again, recent decisions by the Commission in which rate advances were allowed the Pacific Electric and the Southern California Telephone Company." The action of the Governor is an example of the danger of interference that our rate-making bodies may at times experience when decisions run counter to possible political expediency. Rate making and politics must be utter strangers.

This controversy between the Governor of California and the Railroad Commission of California is a good example of one of the most dangerous phases of the relation of government to industry. Many of our politicians, in an effort to win momentary public favor, ignore entirely the true function of



public regulating bodies and attempt to use them for the purpose of driving down public utility rates regardless of the economics involved. The outcry by the radical coterie regarding the railroad valuations as found by the Interstate Commerce Commission is another example of the same thing. If the Public Utility Commissions are to have the slightest value, if they are to accomplish the slightest public benefit, their findings must be based not only upon sound economic fact but must be absolutely unprejudiced by any personal considerations and equally must be acceptable to the public and upheld, whether they raise or decrease rates. If it be true that we cannot select public officers meriting this confidence and to whom this confidence will be extended, then must it be written down that the government of the United States is a failure.

Modern industry has become so intricate that detailed understanding of all its complexities can be had only by individuals specializing in certain branches. No single individual can thoroughly grasp it all, and as a result we must be prepared to accept in good part and in good faith the findings of public commissions created for the purpose of ascertaining the facts and determining what is fair and just compensation. Unfortunately, the political motive at times has crept into such commissions, in the form of unfit officials, either elected or appointed.

On the whole, these public service commissions have been of great value. There is no other way to accomplish the same task satisfactorily. Government ownership and operation is foredoomed to failure and none of us is in favor of giving public

service corporations entire freedom of action. With the experience of each succeeding year, with growing confidence on the part of the public, and with increasing mutual respect between the public, the commissions and the public service corporations, we may expect a still higher type of intelligent control.

We have, however, in the matter of government, been drifting away from the fundamentals laid down by the founders of this Republic. For control through elective representatives we have substituted the direct primary, the initiative, referendum and recall, all of which, as the result of experience, seem to be of dubious value in the advancement of human welfare. More and more we tend towards pure democracy. We have destroyed the practice of election of United States senators by the state legislatures, and we have substituted therefor direct election by the people.

Pure democracy, direct legislation by the masses of the people, election of all officers rather than the short ballot and the appointment of many, never have succeeded and never can succeed. Founded as a republic, the great fundamental thought written into the Constitution of the United States was the delegation of the function of government to a small number of citizens selected by the people. Oregon drove the first wedge in opposition to this principle by passing the initiative, referendum and recall law in 1903. Hailed as the panacea for all our political ills the direct primary, the initiative, the referendum, and the recall, spread from state to state, until more than thirteen states in the Union now have direct legislation in one form or another, and all

citizens participate in direct election of United States senators under the constitutional amendment passed in 1913. Our candidates for Congress, as well as for other offices, must pass through a primary election, the result of which is often not at all in accord with the intelligence and the ability of the candidates. It has produced unquestionably a lower standard of intelligence and ability in Congress. It has also tended to destroy party loyalty without which we cannot have satisfactory government. A great minority has been submerged, is without real representation and is, in fact, in large measure disfranchised. Men of high ability, whose counsels should be heard in national and state legislatures will not descend into the dirty pool of present-day politics to attain office.

We are taking more and more into our hands the functions of government. We are ignoring the fact that, with increasing population and mounting industrialism, both our urban and our rural life have become so complicated, so interwoven, so delicate of structure as to need a far higher type of intelligence than ever before for proper supervision. We need to return to the simple fundamentals of our original government organization. We need also a clearer understanding of the problems of to-day in order that we may, with intelligence, elect representatives capable of handling the situation properly. They should be able to represent not only the majority, but have due regard for the rights of the minority.

We may with ample justification demand alteration of the present system of direct legislation that has most emphatically not worked for human ad-

vancement to the extent prophesied by its sponsors. The initiative, referendum, and recall should be made more difficult to invoke; number of signers necessary to petitions should be largely increased; circulation of petitions at so much per name secured should be made a criminal offense.

The whole theory of the reform was to make possible, as a last desperate resort, direct appeal to the people against corrupt, or tyrannical officials. In practice, it has so worked out that individuals with some money, less brains and a pet theory, have attempted through the initiative to foist upon the people, without first appealing to the legislature, laws that are unsound, uneconomic, and most thoroughly dangerous to our governmental structure. The practice is most insidious in undermining the whole theory of our government that delegates to our legislators the law-making function. Carried to its logical conclusion it would mean abolishment of all elective offices and return to pure democracy; a condition, the dangers of which, the founders of this government clearly foresaw and amply safeguarded against.

We shall not soon return to the old convention system. Perhaps we should not. But it is certain that there is much that can be done in correcting existing evils.

The founders of this nation unquestionably believed that pure democracy resulted in tyranny and merged into mob rule and anarchy. They strove to avoid the two extremes,—monarchy on the one hand, pure democracy on the other,—and attempted to establish a middle ground that would avoid the

injustice of the one, the chaos of the other. Departure from the fundamentals of republicanism leads upon the one hand to autocracy, upon the other to mob rule. Both are undesirable; both are to be avoided only by clinging tenaciously to the fundamentals of our Constitution.

As part of the evolution of government, we have to contend with the evolution of individual ideas. The luxuries of yesterday have become the necessities of to-day, just as the luxuries of to-day will become the necessities of to-morrow. We constantly demand a higher scale of individual living. From the needs of the peasant of the tenth century who deemed himself lucky if he got through the year without being killed and had a warm coat of sheepskin for the winter, our wants have increased in immeasurable degree, and particularly so during the last half-century.

To supply these wants we turn in part, fatuously, to the nationalization of industry, utterly failing to realize that by so doing we would make impossible not only any increase in our standard of living, but would cause an actual decrease due to decreased output under government operation. In the mistaken belief that such nationalization will be beneficial, we have not alone a Plumb Plan for the nationalization of our railroads, but a United Mine Workers' Plan for nationalization of the coal mines, plans for nationalization of all minerals long advocated by the Western Federation of Miners, and yet other plans of one sort and another, the aims and objects of which seem to be the benefit of some particular class with total disregard of the welfare of the great mass

of the common people, who are more or less inarticulate.

It is all symptomatic, of course, of the age old yearning of mankind for better things. Such aspirations and activities mark the evolution of human society, and it is our duty and obligation to see that these activities are, if possible, directed into right channels. Certainly, if we have the slightest knowledge of world history we must realize that humanity *en masse* will never be content to remain inert. In its past struggles for betterment, in its blind attempt to break away from its environment, it has often substituted more unsatisfactory conditions than those abandoned. In its aspiration for higher things it has, through misdirected effort, frequently fallen back to a lower plane. It has, however, never ceased to struggle toward the sun. It is to be regretted that in this great human urge for advancement and betterment so little has apparently been learned through historical retrospect. For two thousand years and more history shows, in never ending succession, attempt after attempt to ameliorate human misery, and where the effort has run counter to sound economics disaster has been the invariable outcome. With all the past to warn and guide us, we should surely be able to act more wisely in the future.

## CHAPTER V

### THE SIGNIFICANCE OF POPULATION IN THE RELATION OF GOVERNMENT TO INDUSTRY

POPULATION is, of course, the most significant single factor in determining the relationship of government to industry. An unpeopled continent with its untouched resources would obviously offer no problems in so far as either government or industry is concerned. The savage tribes inhabiting the North American continent at the time of its discovery equally would afford no opportunity for the discussion of a relationship such as herein outlined, not alone because of the scanty number of these aborigines who were scattered in small groups from the Atlantic to the Pacific, but also because these tribes knew nothing of modern civilization, had but few wants, lived almost exclusively upon the game of the forests and the fish of the streams, and were entirely innocent of any industrial activities and totally without any commercial relations. Their nomadic life led them from place to place, with tepees for shelter; the horse was their only means of transportation save the squaw who served in similar capacity. The natural resources of the continent remained untouched. The fertility of the soil, the variety of

crops possible of production, the metals of the mines, the timber of the forests, were all without value; these things had remained through countless centuries undeveloped, unappreciated, valueless. It was the destiny of American individualism in the seventeenth, eighteenth, nineteenth and twentieth centuries to give them value and make them serve the needs of mankind. These needs were constantly to grow with growing population and increasing scientific knowledge.

The conflicts in America between the Dutch, the English and the French, and above all the American Revolution, clearly indicate that even in the early days, when population was scant, the relation of government to industry was of prime importance. In the case of the Revolution, unwise governmental interference failed to recognize the obvious fact that emigration to America had not altered the sentiments of Englishmen. The Englishmen of America were as quick to revolt as were the Englishmen of England when attempt was made to abrogate or curtail their natural rights so valiantly and persistently maintained from the days when "Magna Carta" was forced from the hands of an unwilling king. As the population of this nation increases, so must grow in importance the relationship between the government and the people. The people must continuously delegate to their representatives new authority to meet new problems as they arise. These representatives must, in turn, see that the government in its organization and its functioning is kept abreast of civilized advancement. Government must not stand still or fall behind as the nation progresses.



If it does and attempts with archaic organization and obsolete methods to supervise, repress, encourage, stimulate or support industrial activity, it will fail. The more obsolete, the more antiquated its method and its organization, the greater will be its failure. It has been in the past one of the indictments of our government that it fails to keep abreast of the times; improvements obviously required have been delayed for decades. Even as vital and important a thing as a national budget was only made possible because of the World War.

With the increasing complexity of modern industrial life, it becomes constantly of greater and greater importance that government confine itself strictly to its own province and not interfere with the proper function of industry. The management of industry has become a province of specialists. The successful industrialist spends a lifetime developing his own particular line of activity. Attempt upon the part of government to nationalize and operate such a complex fabric would be no more successful than the attempt of a blacksmith to repair the most delicate watch with a sledgehammer. The result to industry would be quite as disastrous as to the watch.

Europe has more acutely felt the strain of increasing population than has the United States. We have been and are comparatively free of any wide-spread congestion, although even with us the question is becoming important. In the area between Boston, Massachusetts, and Washington, D. C., the population per square mile equals that of any other equal area of the world. In this territory, approximating 500 miles in length by 20 miles in width, or 10,000

square miles, there is a population of nearly 1200 to the square mile. Comparing this with European densities, we find that England has a density of 900, Belgium 660, France 200 and Germany 400 per square mile. The density for the whole United States is 35 per square mile. In other words, in this zone comprising less than three-tenths of one per cent of the total area of the United States, there is something over 10 per cent of the total population. For this congestion we have found and continue to find relief in part through the outlets to the west and south. It would, however, be idle to maintain that the United States can indefinitely remain immune to the menace of increasing population with its resultant unrest and complexities. Certainly we will require a different national policy in the future both regarding the admission and distribution of immigrants. Concentrating the immigrants in New York harbor is a serious national calamity. They should be distributed from Portland, Maine, along the Atlantic seaboard and the Gulf of Mexico, and sent through the Panama Canal for distribution through the Pacific ports of the United States.

The menace of congestion applies especially to the port of New York, through which comes 70 per cent of the total annual immigration to the United States. The increase in the population of New York, with the great colonies of foreigners so much in evidence, bears witness to the fact that this immigration does not go far afield. New York is no longer an American city; its population is made up of peoples of almost every race. Notably, it comprises among its residents 1,500,000 Jews, most of them of foreign

birth and coming from Russia, Poland, Austria and Germany; 400,000 Italians, 20,000 Greeks, 500,000 Russians, mostly Jews, to say nothing of a heterogeneous collection representing every nation of the world.

The failure of Congress until recently to restrict immigration is another outstanding example of the delay that characterizes congressional effort in dealing with problems of vital national interest. It has been obvious for at least two decades that sooner or later there would be forced upon us some form of immigration restriction. That it has not come sooner is in part due to the cowardice of our legislators who, fearful of offending the hyphen vote of naturalized foreigners, have dodged, twisted and side-stepped the issue until it was forced upon them by the conditions arising out of the World War. The national budget and immigration restriction are two of the benefits which we derived from that struggle, and now that we have succeeded in securing both we are confronted with insistent demand for repeal of both. Fortunately the temper of the American people is such that any backward step in connection with these two legislative enactments is highly improbable.

It has taken us long to realize that the individualism of the American citizen has been challenged by peoples of foreign birth, and that we are in the midst of a ferment created by such attacks. We are reaping the reward of our unrestricted immigration policy; we have been inoculated with the virus of European unrest. Because of this challenge and the abuse of this haven of refuge, we have come to be-

lieve that we may no longer permit indiscriminate immigration. In this we in no way criticize our forefathers who believed that the United States should be a haven for the oppressed of all nations. Having themselves in many instances fled to America to escape persecution and having made large sacrifices in the achievement of liberty, they deemed it fitting that others oppressed by foreign governments should find here the personal freedom denied them elsewhere.

With a great continent uninhabited save for a fringe along the Atlantic seaboard, and that only sparsely settled, there opened up before the newcomer almost limitless opportunity. Subsequent events proved that opportunity to have been far beyond the wildest imaginings of even the most visionary; from the Atlantic to the Pacific, from the Canadian frontier to the Mexican border, untold wealth awaited but the coming of the pioneer. These opportunities have been the sooner realized because of American individualism that, untrammelled and unfettered by government interference, has been left free to carve out its destiny in its own way.

Up to the time of the exclusion of the Chinese, we had admitted to this country without restriction the peoples of the world. Because of this uncontrolled immigration there was added to the problem of the negro of the South the problem of the Oriental in the West. The Pacific Coast was the first to recognize the danger of unrestricted immigration and to demand the exclusion of the Asiatics. It was either that exclusion or there would be left for the future a problem which must inevitably cause greater and

greater anxiety, friction and strife,—the problem of racial supremacy. The solution revolved around the maintenance of the standard of living of the white race, which, in turn, required Asiatic exclusion. In our first meeting with that problem, we adopted the very natural procedure of self-preservation, and exclusion triumphed. It was either that or the orientalization of the Pacific Coast States. Again we have a very clear example of the proper function of government, perhaps blunderingly applied in that there was no attempt at limiting restrictions other than total exclusion.

During this same period the tide of emigration shifted from northern Europe to southern Europe; the English, the Irish, the Scandinavian and the German gave way to the Italian, the Slav and the heterogeneous collection of Turks, Greeks, Armenians, Syrians and others. We were beginning to realize that, after all, the melting pot did not melt; that racial characteristics and instincts were not to be submerged or assimilated; that the Polish Jew was still the Polish Jew, notwithstanding his migration from Warsaw to New York. All these things many of us saw. As cure for much of it legislation was attempted that for one reason or another, mostly selfish, was blocked.

With the acute development of our industrialism and contemporaneous with the twentieth century, we developed a new spirit of unrest, variously referred to as sabotage, syndicalism, socialism, communism. These words, hitherto largely unknown or meaningless, came to have everyday currency and to be seen more and more frequently in our daily

press. The transplanted citizen from Europe, arriving coincident with this industrial development, had brought with him the warped and distorted ideas acquired under despotic suppression, and, failing to realize his conception of liberty, attempted to put into practice in a free country, where there was little if any suppression, the doctrines whispered under the rigid control of tyranny. The very freedom of speech and action, the lack of police supervision, the apparent right to enunciate any and every doctrine, whether subversive of government or not, created false impressions as to what American liberty really meant. For it, attempt was made to substitute the European doctrines of communism and anarchy.

The Haymarket riots in Chicago definitely mark the outbreak of this type of unrest that had for its objective destruction of our social fabric. The underlying motive although unacknowledged, and perhaps sometimes unrealized, was and is the accomplishment of the communistic idea of appropriation of property. In other words, it was the desire of the incapable, the vicious, the degenerate and the criminal to possess without effort property accumulated by others. The sovereign antidote for this spirit is, of course, the creation of the greatest possible number of property owners, the inculcation of thrift and the willingness to work.

That the immigration law is entirely satisfactory even its most ardent supporters would hardly claim. It is a piece of unscientific compromise legislation. The best that can be said of it is that it is better than nothing. Admission of additional numbers of

immigrants of the right character will doubtless be found desirable from time to time. In this connection, examination should be held at the American consulates abroad. Physical fitness, intelligence and reputable character should be prerequisites. Admission should be denied to all who obviously will not become good citizens. Immigration for the sake of a supply of cheap labor should be prohibited unless it be conclusively proved that the United States cannot supply this type of labor, and this is scarcely within the realms of possibility.

The whole question of immigration is an economic one, to be treated scientifically by men particularly capable through training and instinct. To a board composed of such men the immigration problem should be confided, giving the board wide latitude, as is the case in altering the tariff. We are coming to realize that regulation of tariff rates is a matter for expert scientific supervision. Why not similar recognition of the immigration problem?

There can be no doubt that the United States is capable of sustaining a population far greater than that shown by the census for 1920. The extent to which this is possible is dependent upon the wisdom of our government in its organization and operation. More and more we must call upon science to aid, as the struggle becomes keener and the accumulation of wealth more difficult. The things to be had for the taking have already practically disappeared. If we desire timber or farming land we must buy it. Valuable mineral deposits obtainable by location are extremely difficult to find. The result is that development has become largely a matter of capitalistic

enterprise. Certainly this is true of agricultural conditions. Our best lands have long since been preempted. We have mainly barren deserts and distant Alaska still open for land settlement. The one offers little possibility of profitable return; the other a climate so rigorous that growth of population will come only through pressure of overpopulation elsewhere.

The increase in world population is bound to have a direct effect upon our own problem in that the greater the pressure of overpopulation in Europe, the greater becomes the pressure of immigration into the United States. The significant fact in this connection is that the great increase in European population has occurred within the last two centuries, the most startling increase within the last sixty or seventy years. Europe in 1772 is credited with a total population of 142,000,000 souls. By 1872 this had risen to practically 300,000,000; but even this rate of increase is slow when compared with the period 1872-1912. During this period of but forty years the population increased from 300,000,000 to 450,000,000. Russia in these four decades increased its population 90 per cent; Germany 62 per cent; England 50 per cent; Austria-Hungary 40 per cent; France less than 10 per cent. Emigration during the same period drew 6,000,000 from England, an equal number from Germany, and half as many from Russia, Italy and Austria-Hungary. Broadly speaking, the population of the world doubled in the hundred years 1772-1872, while the population of America as a whole increased 700 per cent, and of the United States alone, 1,000 per cent. The significance of the



increase from 1800 onward cannot be overestimated, and we naturally turn to an investigation of the reasons for this increase and to the question as to whether Europe is not overpopulated to-day.

Professor Edward M. East, of Harvard University, estimates the world saturation point at 5,200,000,000, which at the present rate of increase would be reached in a little over 100 years. It is illustrative only of what would occur if it were not for economic checks that in all human probability will not permit the present rate of increase long to continue. It has been estimated that at the present rate of increase world population doubles every 60 years. In other words, we are dealing with compound interest in this problem of population just as we deal with it in connection with our consumption of raw materials. As indicating the probable diminution of the rate of increase, it is worth noting that the birth rate in England, France and Germany has declined materially in the period 1911-15 as compared with 1871-76,—in England from 35.3 to 23.6; in France from 25.3 to 18.5, and in Germany from 38.9 to 27.5. This, however, does not tell the whole story. The death rate has also decreased due to numerous causes, among them preventive medicine and modern hygiene.

As to our own ratio of increase in population: 100 years ago we were a nation of 9,500,000 people; 50 years ago we numbered only 40,000,000. To-day we are pressing on towards 115,000,000, and if the rate of increase of the last two decades is maintained, we shall number 260,000,000 in 50 years and 610,000,000 in 100 years. Obviously a growth

that economic pressure will not permit. It is to be noted that while the rate of increase may lessen, yet as the total population on which the lessened rate operates is very large,—the result is still a tremendous increase in population. Thus if a hundred years ago the rate of increase of a thousand people was 20 per cent, the result was a gain, thus recorded:  $1000 + 200 = 1,200$ . To-day if the increase operates on 5,000,000 people at only 5 per cent, we have  $5,000,000 + 250,000 = 5,250,000$ .

In searching for the causes of this increase, we find that transportation plays a most important rôle. The wage of a British laborer for three days is sufficient to pay for the transportation from the United States or South America of the beef and wheat that he consumes in twelve months. Without this transportation the population of Europe would starve. The dependence of Europe upon other parts of the world for food supplies finds no better illustration than in the results of the blockade instituted during the World War and which was in large part the cause of the downfall of the Central Powers. Modern transportation and modern communication by electricity makes it possible to bring almost overnight ample food supplies to London, Hamburg or Paris, which cities could not have grown to their present magnitude save for this facility of transport. The remote areas of the world are levied upon and the supplies so obtained transported and distributed with a certainty, a despatch, entirely lacking in mediæval times. In those remote centuries inland communication over long distances was lacking in so far as it related to the transportation of food supplies.

Areas now considered the granaries of Europe might then as well have been in some other planet so far as making their products available to the peoples of Central Europe.

In addition to this facility of transportation as a cause of increase of population must be added advances made in the use of preventive medicine. Within the memory of millions of people now living a revolution in the practice of medicine has occurred such as no other period in history records. The fearful mortality attendant upon plague and pestilence has been in large degree eliminated. The statistics of death from disease and infection for the period of the Civil War find no parallel in the statistics of the World War. The frightful mortality attendant upon war has been in great part eliminated. Typhoid, typhus, malaria, smallpox, the plague, have been successfully combated. Scientific methods, certain in their results, have been placed at the disposal of the medical fraternity and the great scourges of disease that in past generations afflicted mankind and reduced populations by as much as 50 per cent, have been conquered. Life expectancy has been increased within the last century from 41 years to 53½ years.

As recently as 1865, Pasteur made his discoveries and announced the results that were to revolutionize the medical practice of the world. But yesterday (1869) Lord Lister was battling with infection in the hospital at Edinburgh, while to-day, infection attending surgical operation is practically unknown. Modern asepsis has met and conquered this menace until the most delicate capital operations are per-

formed with practical immunity so far as infection is concerned. It is a far cry in medical advancement from the period of the Civil War, when the surgeon stropped his knife upon his boot leg and plunged it, loaded with disease germs, into the open wound, and the surgery of to-day where all instruments are boiled, dressings and the like thoroughly sterilized, and the fear of infection eliminated.

With this advance in modern medicine has come another problem which in future generations may have a profound effect upon the human race,—that is, the survival of individuals who under more rigorous conditions would have succumbed. What the significance of this may be is not part of this discussion other than to point out that all modern tendencies are in the direction of prolonging life, maintaining the physically weak and degenerate, saving and reconstructing many who in other centuries would have perished. All of this adds materially to the growing population and, unfortunately, often adds a class highly undesirable as citizens. There are almost two million defectives in the United States to-day needing institutional care, of which a very large part inherit their characteristics. The elimination of this element by proper selection, sterilization and like methods is one of the forward steps that will be forced upon us in future generations.

To this increasing population has been added also the problem of the concentration of population in our great cities. This is not alone in evidence in the United States, but applies with equal force in many parts of Europe. Our own urban population in 1790 was 3.4 per cent, our rural population 96.6 per

cent; in 1870 the urban population had risen to 21 per cent, the rural had fallen to 79 per cent, while in 1920 the urban had increased to 51 per cent and the rural had shrunk to 49 per cent. It is all, of course, part of the penalty we pay for establishing an era of industrialism which involves unprecedented use of mechanical power. In Great Britain this relation in 1850 was 51 per cent urban, 49 per cent rural; in 1900 77 per cent urban, 23 per cent rural; in 1911 (latest available data) the ratio seems to be still the same as in 1900.

The growth of the cities of the world directly reflects the growth of the industrial era. In 1831 there were only 16 cities in the world with a population of 200,000 and over; in 1920 there were 198 such cities, of which 33 were in the United States. The story is the same in every country. It is more acutely in evidence in the countries leading in industrial advancement. In the period 1831-1920 London has grown from 1,655,000 to 7,258,263; New York from 203,000 to almost 6,000,000; Vienna from 250,000 to 2,400,000; Berlin from 220,000 to 1,900,000; Paris from 785,000 to 3,300,000. In the United States in 1831 many of our present great cities were practically nonexistent; Chicago, St. Louis, Detroit, Milwaukee, Minneapolis, St. Paul, Buffalo, Denver, San Francisco, were either a collection of straggling villages or were entirely without existence. Turning to Germany, a nation that has made the greatest industrial advancement in recent years, we find that the concentration in cities has been equally as noticeable as in the United States and that the principal German cities have grown equally as fast. In forty

years Frankfort grew from 80,000 to 400,000; Düsseldorf from 70,000 to 360,000; Dresden from 259,000 to 550,000; Hamburg from 306,000 to 600,000; Munich from 275,000 to 1,000,000. There are in Germany thirty-three cities whose combined population is over 12,000,000, or 20 per cent of the population of the whole nation.

So we have added another factor to this perplexing problem, that is, the concentration of peoples in large cities, with all the attendant complications. Residents in modern cities are interdependent, in contradistinction to the independence enjoyed by our ancestors a century or more ago when the domestic unit was in very great degree self-contained. Disruption of transportation facilities, modern industrial strikes and the like, would have had but little effect in those old days. The farm largely supplied the needs of the family, the products of the spinning wheel sufficed for clothing; the tallow dip and the log fire furnished illumination. The animals of the barnyard and the crops of the field supplied both food and raw material for fabrication. In contrast to this we are faced with the modern city of one to several millions of people whose food supplies come in overnight by train, boat or automobile to be consumed the following day, leaving little surplus available, so that stoppage of transportation for a few days would mean starvation. For fuel they depend upon the will of miners and railway employees. The current supplying their electric lights is generated in great central power plants that depend for their motive power upon coal mined perhaps hundreds of miles away. Without railway transportation this

coal would be unavailable. It may be that this energy is furnished by hydro-electricity generated at great distances made available through a network of transmission lines that are coming more and more to cover the country. In either case, the city resident is utterly dependent upon these outside sources which can only be made available by coöperation. Modern city life is almost entirely dependent upon the will of outsiders. There is no such thing as independence. Every one is relying upon some one else; the fabric is most delicate in structure and menaced by the merest touch. In such communities our industrial activities are mainly centered. We rely upon these cities as sources of labor. Our great industrial plants are there located, relying for their operation upon power furnished by electric power-distributing companies or made from coal, continuity of supply of which depends upon the miners and the railroad employees. The raw materials consumed are also transported hundreds and thousands of miles from the fields and the mines of the West and the South. The continuity of this supply is equally dependent upon the will of others.

All of this connotes an interdependence between the cities and the sources of supply that grows greater with each lapsing decade; that becomes more complex as population increases and that makes for an economic structure so delicately poised, with details so completely interwoven that the whole must operate harmoniously if any part is to function. In contrast with this are the simple living and manufacturing problems of a century and more ago. It is this modern condition of the urban population,

with its attendant industrial activity and growth, with its dependence upon outside supply, that makes the relation of government to industry more complex, more delicate, than ever before. It calls for the highest type of efficiency and wisdom in harmonizing that relationship, in permitting industry to operate most efficiently and in keeping government within the limits of its proper function.

It is obvious that a fabric so delicate must be governed with wisdom. It will no longer suffice that government "muddle through"; that it perform its duties regardless of cost or delegate its tasks to servants unfit by intelligence or training for the position. More and more it is becoming necessary that the government servant should be not only well equipped, but expert in the particular work undertaken. Peace officers particularly must be thoroughly trained and disciplined. We elect to office men, notorious failures in commercial life, who seek political preferment as a means of livelihood. We permit many of these incumbents of our elective offices to engage in other lines of work, and then expect government to be as efficient as private industry. Under such a system we demand nationalization of industry in behalf of public welfare,—the very thing above all others that would be most detrimental to the public weal.

Our cities and counties have become great financial institutions, the management of which can no longer, with safety to the public, be delegated to inefficient, inexperienced and ignorant public servants. We need to build up in our communities a greater realization of the responsibilities attendant



upon public office; we need to realize that the profound business of the American citizen is the business of government; that without stable, beneficent, wise and efficient government our individual efforts may go for naught. Above all, our citizens must appreciate the fallibility of human judgment. It behooves us, therefore, not only as a duty to the form of government under which we live, but as a matter of self-defense, to take a more active interest in the selection of our officials to the end that we may have in our public offices the same high type of business efficiency that characterizes the best of our private corporations. It will no longer suffice that the public servant devote a portion of his time to public affairs and the balance to his private business; public service requires the entire time and attention of the paid operating official just as does private business.

We have outgrown the straggling village community of a few hundred or thousand, with its unpaved, unlighted and unsewered streets. Evolution has substituted for this the great cities of millions of people, brilliant with electric lights, with streets paved with asphalt or brick, drained by a network of sewers, and in the sum of its financial undertakings spending annually amounts of money far in excess of the requirements of many nations of one or two centuries ago. The future welfare of this congested population, the future solution of the problems attendant thereon, cannot be left to rule of thumb or blind chance. It is our increasing population that has precipitated upon us this multitude of problems. This population has been made possible

only through the scientific development of the last one hundred years.

Rational progress demands a scientific development of the art of government which should be so constituted as to guide and control, with wisdom and intelligence, the use of the forces of nature which inventive genius has made available and which in turn have made possible the tremendous growth of population that is contemporaneous with the advent of steam, electricity and petroleum. Failing to recognize the significance of these new forces in their relation to population and plan accordingly, we shall have provided implements which eventually will destroy us.

## CHAPTER VI

### THE SIGNIFICANCE OF RAW MATERIALS

EVERY forward step in civilization brings with it an increase in population and increasing demand for raw materials. Modern civilization, because of its industrial development, depends more and more for its well-being upon ample supplies of raw materials; the higher the type of that civilization, the greater its dependence. We have, to-day, two distinct forces operating in our national life, the one industrial, the other agricultural. The rise of industrialism has been the outstanding development of the nineteenth and twentieth centuries. In past centuries peoples depended largely upon agriculture for livelihood. There has been added a great industrial development due to the applications of steam, electricity and petroleum in furnishing mechanical power. Rural life has of course been enormously affected by the rise of industrialism, but it remains to-day far more nearly independent of surrounding conditions than does urban life. The farm could again, if the necessity arose, become practically a self-contained unit. The dwellers in the cities must always rely upon others for their well-being. They must not only rely upon others for their foods, but they must have large quantities of raw materials to supply their factories in order that their

method of living may continue. As an economic measure, therefore, to safeguard our national welfare and world peace as well, we must handle our natural resources with the greatest skill and efficiency. We must plan our international relations in such a way as to make available foreign sources of supply by just and equitable arrangements with foreign countries. Equally we must make available our own products to foreign countries under just and reasonable regulations.

Food is a prime necessity to all the peoples of the world. Transportation to make the food of the world available is equally essential, for without proper transportation facilities the population of large areas of the world must starve. China raises food enough for all her people. It is because of lack of transportation facilities that food is not sent to a famine district and that millions perish. There is an interdependence between mineral products and food supplies under present-day organization of society which makes one quite as vital as the other to large masses of the world's population. Lack of mineral products with which to manufacture the machines and utensils of present-day transportation would affect not only food supplies but the animal and vegetable products so essential in everyday commerce. Destroy or cripple these transportation facilities and our great cities must collapse; population must spread over vastly greater areas, the people must return to the conditions of pastoral life existing prior to the dawn of the industrial era, and with it all, of course, must come a decline of population due to starvation.

During the early days of the war there was considerable talk of suppressing nonessential industries. It was soon discovered that because of the complexity of the industrial fabric nonessential industries were practically nonexistent. There were, it is true, industries that could correctly be termed less essential, but the word "nonessential" quickly disappeared from the Washington war-time vocabulary. It was found that manufacturers of farm tractors in the Middle West depended upon the manufacture of chain in New England, without which the driving power of the tractor engine could not be applied, and the machine became useless. Miners of fuller's earth in Florida, because of priority orders, were practically put out of business. It was quickly discovered that without this product the lubricating oils manufactured by the oil industry could not be properly filtered. Cutting off glass manufacturers in Pennsylvania from their natural gas supply, by priority order, quickly brought protest from the Navy, for which they were manufacturing electric light bulbs, without which the naval vessels could not operate. Without the binder twine made from the sisal of Yucatan our wheat harvest could not be harvested unless the hemp from the Philippines is forthcoming. Dozens of similar incidents soon brought the authorities to realize that our industrial fabric was so interwoven and complex that failure of one branch to function might start a wave of disorganization which would be nation-wide in paralyzing industrial activity.

What has thus been said has been said in vain if it has not brought home to the reader full realization

of the interdependence of all industries, even those apparently unrelated. It is a homely illustration,—that of the modern complex steam engine, but none serves better to emphasize the point. The inexpert man looks at such a huge engine, notes the power and smoothness of operation, sees the immense wheels, pistons, and rods, and sees little else. But the skilled engineer knows that the failure of some obscure valve to function properly will throw the whole vast fabric out of gear, and if not properly attended to will wreck it totally. Exactly so is it with our national industries, and to a lesser extent so is it with the dependence, one on the other, of international industries.

We have, therefore, inseparably intertwined with the problem of food supplies and supplies of raw materials for our industrial population centered in the great cities, the additional problem of so adjusting the relationship as to keep in healthy condition all branches of industrial activity. No nation is self-contained in the supply of raw materials it consumes. Some are far more bountifully endowed than others,—none so prolifically supplied as the United States,—and yet bountifully supplied as we are, there are some products fundamental in our national life which are entirely lacking within the confines of our own territory.

The World War brought to the peoples of all nations realization of facts obvious for generations to thoughtfully inclined citizens. Underlying the tangled network of causes leading up to the World War, fanning the flames of race hatred, was the problem of raw materials. Germany, the industrial

power which more than any other nation was progressing by leaps and bounds, and that might well in another half-century have dominated the industrial world, faced ultimate failure in her ambition for industrial supremacy because of lack of raw materials. Active and sympathetic government coöperation stimulated industrial growth by all kinds of devices. In order to realize her ambition, it was necessary for Germany to be sure of raw materials upon terms of equality with other countries or perhaps even on preferential terms. Russia had long since been penetrated industrially; a majority of Russian industrial institutions were under German management at the outbreak of the war. The resources of the Russian Empire were becoming more and more available to German industry, but the ambition of Germany went much further afield than the Russian Empire. She was confident of her ability in armed conflict to defeat France and Russia. Had she been right in believing that England would not enter the conflict; had Belgium not been invaded; and at a later date had not the United States been goaded into participation in the war, Germany today would have at her command, upon terms of preferential priority, the raw materials of the world.

Germany, in 1871, obtained possession of Alsace-Lorraine, primarily because of the iron deposits of Lorraine, through the acquisition of which German industrial advancement was made possible. It was the minette iron deposits of this district that enabled her to continue the war, and in fact was one of the factors causing the war. The desire of France to recover her lost provinces was not a matter of

revenge alone. The influence of such recovery upon the industrial life of France was of far greater significance. It meant the restoration to France of the greatest iron ore reserve of Western Europe. Luxemburg would undoubtedly have passed under German control had she succeeded in the adventure of war, because the Lorraine iron deposits continue into the Duchy of Luxemburg and are of material significance in the industrial development of Western Europe. With the return of Lorraine, France has been placed in a position of industrial strength far beyond anything she might otherwise have hoped to attain, and in equal degree the industrialism of Germany has been crippled. The Saar Basin, the Ruhr, the coal of Belgium and France,—all these resources are pawns in the struggle for industrial supremacy. The invasion of the Ruhr by France was planned for the purpose of so crippling her industrial life as to render Germany impotent. Camouflaged under the guise of reparation demands, France has paralyzed German industrialism, and has occupied territory that will be relinquished only under pressure so strong as to make further occupation impossible. The menace of the future peace of Europe lies in the possibility of German penetration and industrial domination of Russia, turning the forces of Russian raw materials and Russian man-power to use under the guidance of German intellect. It is in an endeavor to counteract this menace that France has so vigorously aided in the creation of the buffer state, Poland, that now separates Russia from the German Republic.



No fact is more obvious than that the raw materials of the world should be put to use with greatest prudence and efficiency. National life is not a matter of a decade or a century, it requires for its welfare planning long in advance. The world is endowed with enormous mineral reserves, but owing to the increase of population and per capita consumption the most efficient methods only should be employed in utilizing these resources. It is highly probable that the world in one year now consumes more mineral raw materials than in the first eighteen centuries of the Christian era. Conservation is no longer a matter for political discussion; it is a vital element in the future welfare of all nations and is a policy necessary to all nations.

Because our own consumption of raw materials exceeds that of any other people conservation to us has become a question of greater significance than to any other nation. Unfortunately, to the minds of many, conservation means the locking up of natural resources, their arbitrary withdrawal, bringing about, in short, a condition of industrial stagnation. Two eminent engineers have variously defined conservation as follows:

"True conservation is not hoarding, but the wise use of natural resources; and it implies not merely the preserving in unimpaired efficiency, but also a wise and equitable exhaustion with a maximum efficiency and a minimum waste. . . . Conservation, therefore, demands intensive rather than extensive use; takes cognizance of equitable distribution; aims to bring about social justice, and means the greatest good to the greatest number—and that for the longest time."

"Both in legislation and in public opinion we must maintain, as essential, a rational basis for the conservation movement, which recognizes (1) the rights of the individual to property and

to reasonable profits on his investments and his labor, and (2) the paramount rights respectively of the community, of the state and of the nation to safeguard the future as well as the present welfare of its citizens "

Our national and individual life is dependent upon the products won from the soil by the husbandman, hewn from the forests by the axman, or torn from reluctant Mother Earth by the driller or the miner. By proper conservation and renewal of soil ingredients the products of the farm may be reproduced indefinitely. Reforestation may renew the trees of our forests that are now being exhausted four times faster than they grow; but the minerals of the earth, once removed, are gone for all eternity. Turn, therefore, where you will, you face the problem of conservation in some form, whether in the field, the forest or the mine; but most acutely of all in the mine, where we are dealing with a wasting asset that, once exhausted, leaves as a heritage for future generations only scars and gashes upon the surface of the earth.

Much has been said in the past in criticism of the extravagant and wasteful manner in which America has developed and exploited her natural resources. It was inevitable that it should have been so. And yet, was it really waste? The very profusion and seeming limitlessness of our resources made for extravagant development and consumption. Why should we conserve, when products were a drug upon the market and the available supply apparently without limit? There was apparently neither reason nor necessity. Nor must we forget that the very speed with which we grew was made possible only

by ignoring waste and making prodigal use of what we had at hand.

There is no fact more certain than that our industrial life, as contrasted with our agricultural life, cannot prosper or continue without adequate supplies of raw materials. The whole fabric of industrial advancement of the last century, with its attendant concentration of people in the cities, is predicated upon the continuity and abundance of these supplies. Interrupt the flow or render their acquisition uncertain or difficult, and we strike at the very fabric of our urban life. As a matter of self-preservation, therefore, it behooves us not only to exercise rational conservation of what we have, but so to plan our international relations as to make available, so far as possible, additional supplies from other parts of the world.

We are bombarded by some of our political officials, masquerading as statesmen, with the plea that we adopt a policy of isolation; that we refrain from all foreign entanglements. This plea is made in face of the fact that because of our civilization, with its multifarious demands for raw materials, we are already entangled, through commercial necessity, with all parts of the world. This entanglement must inevitably grow stronger as the years elapse, due to our increasing requirements and to our decreasing domestic supply of mineral products.

This condition demands guarantee of government support in protecting foreign investments. No function of government is more clearly removed from the field of controversy than that relating to such protection. The policy does not mean imperialism, the

ruthless looting of smaller nations or commercial piracy that some of our short-sighted politicians would have us believe. It is very correctly and forcibly outlined by Woodrow Wilson in his Mt. Vernon speech, in which he said that future relations of nations must rest upon . . . "the consent of all nations to be governed in their conduct toward each other by the same principles of honor and respect for the common law of civilized society that govern the individual citizens of all modern states in their relations with one another; to the end that all promises and covenants may be sacredly observed, no private plots or conspiracies hatched, no selfish injuries wrought with impunity, and a mutual trust established upon the handsome foundation of a mutual respect for right."

Economic necessity will in future make it more and more imperative that our foreign policy be definitely fixed in safeguarding against confiscation, under whatever guise, of American capital invested in foreign countries. There is no escape from this policy unless we are content to have the mineral resources of the world pass under control of other countries, leaving us to pay whatever price may be exacted. Only recently the people of the United States have been made conscious of the fact long known to all intelligent observers, that while we were and are the largest consumers of rubber in the world we produce no rubber within our territory and have no prospect of so doing. The effort to fix a price of rubber under the auspices of the British Government was merely notice to us of what might be attempted with equal success in other directions.

The right of nations to demand reasonable compensation for their products is unquestioned. Attempt at extortion because of monopoly of control can only lead to international friction, ill will and possible armed conflict. That such conditions could arise between the English-speaking peoples of the world is unthinkable. We must be prepared to do our part in preventing such strife and in the doing it is necessary that we deal always fairly, justly and honestly, just as we have a right to expect similar treatment.

Because our mineral resources are diminishing, because conservation and efficient use is a fundamental requirement, it does not follow that it is the function of government arbitrarily to interfere with our activities in producing and distributing our mineral products. Certainly there is not the slightest excuse for government invasion of the field of production, distribution or manufacture. Such action would produce exactly the contrary result to that desired.

In the matter of animal and vegetable products, we do not confront the unsatisfactory condition in evidence in dealing with our mineral resources. The former may be renewed from season to season; the earth, as demand is made upon it, can by intensive cultivation and fertilization assure an indefinite production of all foodstuffs we may require. Great areas of the earth are yet practically virgin so far as intensive cultivation and production are concerned, and in the areas already under cultivation systematic effort governed by economic need will greatly increase the output per acre.

This does not hold good as related to our forests. In no branch of governmental effort is there greater opportunity for illustrating the proper function of government than in its relation to our forests. Our forest reserves are rapidly diminishing. Originally covering more than 822,000,000 acres of virgin forest, there remains to-day but 138,000,000 acres of virgin timber. Alaska, of course, still has great areas untouched, but much of this upon the seacoast is fit only for pulpwood. Other areas are so remote from transportation and the centers of population in the United States that it is doubtful if it will ever become profitable to cut and transport the lumber. Already we have come to rely upon Canada as a source of a considerable part of our woodpulp for paper manufacture. We are consuming or destroying annually 20,000,000,000 cubic feet of timber; new growth replaces scarcely 6,000,000,000. The forests of New England are practically gone; the white pine of the Great Lakes area is exhausted; Chicago draws its lumber supply from Louisiana and Washington, paying more for freight than the lumber cost delivered twenty-five years ago. Because of the rapid exhaustion of the yellow pine of that territory, the operators of Louisiana are moving to the Pacific Coast in order to take advantage of the great remaining reserves of the United States which lie west of the Rocky Mountains. Twenty-eight of our states are now importers of lumber. Prices in the central and western states have reached standards so high as seriously to reduce per capita consumption and create thoroughly undesirable industrial and social conditions because of the shortage of dwellings due

to high prices. Substitution of more expensive materials, steel, cement, stone and brick,—is the only possible solution unless we adopt a vigorous policy of reforestation. The benefits of such a policy will only be reaped after a lapse of several generations.

President Roosevelt's policy of creating national forests is the most effective measure yet enacted into law, but these forests represent only 17 per cent of the total acreage of the original forest land of the United States, and acre for acre are certainly far inferior to our original forests. The Federal holding cannot be expanded so as to embrace the major portion of the forest land of the country, for most of it is now in private ownership.

Again we confront the unwisdom, the dilatoriness, the delay of government that concerns itself only with the immediate present and makes no effort to legislate in anticipation of conditions that must inevitably arise a decade or several decades hence. Coöperation between the federal government and the states is necessary in developing any satisfactory policy of reforestation. Replanting of forest areas must in many localities be of considerable utility in helping store snow and rain. The familiar example was frequently used by Theodore Roosevelt of the cut-over areas of China and the dreadful national detriment arising therefrom,—a sufficient warning to us of the need of proper forest conservation. There must be greatly increased coöperative action in fire protection, control of methods of cutting, and encouragement in replanting cut-over areas. In less than 50 years the forests of the far west, our remaining great reserves, will have prac-

tically disappeared unless coöperative action is had looking to their proper conservation.

As related to our mineral raw materials we confront a totally different situation in that once exhausted these minerals are irreplaceable. We have as yet felt no embarrassment from the lack of these products; none of them have as yet been exhausted. It is probable, however, that the limitations of many of them are very definitely known, and if the time of their exhaustion cannot be calculated with any mathematical exactitude, we are justified by past experience in assuming that there is little likelihood of discovering any very large additional tonnage compared with that already developed and produced. It will not be amiss, as part of this discussion, to present some facts concerning our resources. Bountifully endowed as we are, statistics will show two things; first, that our known resources of many of the mineral products are scant as compared with future demands; second, that there is a total lack in the country of some of the most important minerals, which we now import and must continue to import from foreign countries.

In making the survey of our resources, we must keep in mind our growing needs, as well as the requirements of the world at large. We must know and realize that we are the largest consumers in the world of many if not all natural products, and to this extent, we are more vitally concerned than any other nation. The following table will serve to show the astonishing rapidity with which the production of certain of these minerals has increased in the United States:



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		PIG IRON		COAL	
		Millions of Long Tons	Tons per Capita	Millions of Short Tons	Tons per Capita
1870	.....	1.7	.043	33	.83
1880	.....	3.8	.076	71	1.4
1890	.....	9.2	.15	158	2.5
1900	.....	13.8	.18	270	3.6
1910	.....	27.3	.30	502	5.5
1918	.....	39.1	.38	678	6.5
1919	.....	31.0	.30	554	5.3
1920	.....	36.9	.35	658	6.2
1922	.....	27.2	.25	477	4.4
1923	.....	40.4	.37	641 (estimate)	5.8

		COPPER		PETROLEUM	
		Millions of Lbs.	Lbs. per Capita	Millions of Bbls.	Lbs. per Capita
1870	.....	28	.70	5	.13
1880	.....	60	1.20	26	.52
1890	.....	260	4.13	46	.73
1900	.....	606	7.97	64	.84
1910	.....	1080	11.74	210	2.28
1918	.....	1909	18.43	356	3.44
1919	.....	1286	12.25	378	3.60
1920	.....	1209	11.44	443	4.19
1922	.....	950	8.70	558	5.11
1923	.....	1435	12.96	735 (estimate)	6.64

It is interesting to compare the above table with world production:

	PIG IRON Long Tons	COAL Short Tons	COPPER Lbs.	PETROLEUM Bbls.
1910	65,000,000	1,279,000,000	1,892,000,000	327,763,000
1920	60,000,000	1,454,000,000	2,112,000,000	695,281,000
1922	49,000,000	1,348,000,000	1,867,000,000	858,715,000

It may be noted from the above tables that in pig iron the United States in 1922 produced 56 per cent of the world's total; in coal, 35 per cent; copper, 51 per cent; petroleum, 65 per cent. It is also worthy of note that in the past fifty years our production of pig iron has increased seventeenfold, of coal

fourteenfold, of copper thirty-six fold, and of petroleum one-hundred and ten fold. No more eloquent plea can be made for industrial and governmental coöperation in matters of conservation and efficient use of our mineral resources than is contained in these few statistics. With such rates of increase, both in total and per capita consumption, it requires but little imagination to picture the demands that will be made for these commodities in future decades. Broadly speaking, we may safely say that normally our requirements for the great basic raw materials will increase at a ratio varying between 5 and 10 per cent per annum over the previous year's output. The World War caused temporarily an enormous increase in output of raw materials, with a subsequent decline. Normal conditions ere long should again be the rule.

To supply the demand, we must double our output every 15 or 20 years because of the enormous increase in consumption. This future growth has a significance that did not attach to our early-day experience. Not alone are we constantly consuming more in total tonnage and in per capita, but in the case of our raw materials we are faced with a constantly diminishing supply. Our pig iron output of 1900 was only 13,000,000 tons; doubling that would have amounted to 26,000,000 tons. Taking the output of 1922, 27,200,000 tons, and doubling that, we find that we should require in 1942 a total output of 54,400,000 tons, an amount 32 times our 1870 production of 1,700,000 tons. The same threatening aspect due to compound interest is in evidence in connection with the other raw mate-

rials, and we may well ask ourselves: Where will it all end?

We may with profit more specifically turn our attention to the statistical position of some of these great mineral assets.

### *Coal*

While it is true that we have in the United States over 50 per cent of the coal of the world as compared with Great Britain's 6 per cent, France's 2 per cent and Germany's 6 per cent, it is also equally true that we are in sight of the time of exhaustion of the most desirable qualities. This is notably true of the anthracite of Pennsylvania, which has been so significant in the domestic economy of our eastern cities, where the burning of smoky coal is prohibited by law. The low sulphur coking coals are also none too plentiful. There remains still, however, the enormous tonnage contained in the bituminous and lignite deposits. Keeping in mind locality and quality, we are to-day at a point where rational coöperation is necessary between government and industry in conserving these resources. No form of our industrial effort has more clearly demonstrated the need of wise government supervision than that connected with the coal industry. Over-manned, over-equipped, acutely sensitive to seasonal requirements, it has been burdened with production in excess of consumption. Public welfare demands regulation of a character that will balance supply and demand. It is such a definite departure from existing practice, that charges of

dictatorship, czarism and similar autocratic forms of government may quite conceivably be hurled at a program having any such ultimate objective.

The industrial progress of the country has been met by mining an ever increasing quantity of coal. There has been no inducement to conserve this product or utilize the enormous quantity of by-products to be derived by carbonizing the coal before burning it. It has largely been a question of economics, in that coal has been so plentiful and so cheap that there has been no economic incentive to utilize it efficiently. Of late years there has been, however, a growing tendency to abandon the beehive type of coke oven in favor of the by-product oven.

The chemistry of coal tars, with the endless array of dyes, explosives, and other substances made therefrom, is one of the triumphs of industrialism. Brought to a high state of perfection in Germany, the German government in coöperation with the chemical industry, dominated the market. It was only with the outbreak of the World War and the consequent cutting off of the German source of supply, that it was possible for England and America successfully to produce these coal tar products. It was discovered that many of the German patents bearing upon this subject had been secured with the purpose of leading investigators astray; formulas were garbled, only stated in part, and entirely false practice indicated. The trend of events has created an economic demand that justifies use in greater and greater degree of these by-products of coal.

The public has been little concerned with this

question of coal conservation, because prices were low and there was no incentive to conserve. That the benefit will be enormous is quite obvious under most cursory examination, although perhaps impossible of exact expression in figures. The full recovery and efficient use of the products of coal now lost in consumption might easily double the fuel value of the coal mined; in other words, our present coal output could be made to do double the work now obtained from it. If this basis of calculation is assumed, the aggregate loss runs beyond a billion dollars annually. Distribution of this amount of national wealth in our commercial life would be of incalculable cumulative value.

It is an entirely proper function of government to demand of the coal industry that it so coördinate its activities as to make these by-products, in so far as possible, available. It is the duty of government to see that the mining methods are such as to recover the greater part of the coal in comparison with the wasteful methods in past practice resulting in a loss of as much as 50 per cent of the available tonnage.

### *Petroleum*

Of all mineral resources, petroleum offers, perhaps, the widest field for constructive government co-operation; it also, unfortunately, offers the greatest opportunity for governmental bungling. Deeply hidden beneath the earth, its occurrence is obscure, its total tonnage possibilities uncertain and fruitful of never-ending debate. It is one of the few migra-

tory minerals. Its production results in keener competition than in any other kind of mining. The reason is simple. Unless the owner of a small piece of land is intensely active in drilling and producing petroleum, his surrounding neighbors will inevitably drain his territory and become possessed of property originally his, but which through migration has been captured by adjoining operators.

Oil wells produce most prolifically immediately or shortly after completion. Decline then commences and continues with varying rapidity to the point of exhaustion. Some wells have produced less than six months; others have maintained a fairly large volume of production over a number of years. On the average, it is probably safe to say that 50 per cent of the total production of a well is obtained in the first two years of its life; the balance over an indefinite period, diminishing to a point where perhaps less than one-half a barrel is the daily production. From a daily production of thousands of barrels, we run the whole gamut to those old wells producing but a fraction of a barrel a day. The average of all the wells in the United States will not exceed four barrels per well per day. Omitting those of flush production, the average is much less.

It is of vital necessity that new fields be discovered every year to replace the decline of old wells and supply increasing consumption. One and one-half per cent of all the wells in the United States produce one-third of the oil;  $2\frac{1}{2}$  per cent produce one-half of the oil, and the remaining 260,000 produce the other half. The conclusion is obvious; continuous discovery of new fields, importation from

foreign countries, or shortage. The question confronting the government and the oil industry is: CAN NEW OIL FIELDS BE DISCOVERED WITH SUFFICIENT RAPIDITY TO REPLACE THE DECLINING OR EXHAUSTED FIELDS AND IN ADDITION SUPPLY THE INCREASED DEMAND? Or have modern methods, both geological and mechanical, been so improved as to make the finding of new pools so comparatively simple as to assure a flood of oil until the inevitable shortage due to exhaustion is at hand? It has been found over the period from 1904 to 1914 that the annual increase approximated  $8\frac{1}{2}$  per cent of the previous year's total output. This increase has been remarkably constant since 1914, with the exception of 1922, in which year a production was reached that normally would not have been attained until 1923. For 1923, a production of 735,000,000 barrels was obtained, with the peak apparently not yet in sight.

That this rate of increase can continue over many years seems almost incredible, but the same was said in 1914 of the estimates for the period 1914-1924 based upon the increase from 1904 to 1914. One thing is certain, that the consumption of petroleum is limited only by the supply and price. As a fuel it far excels coal; it would instantly supplant coal as a fuel if the supply was adequate. Its value for other purposes is so great that as a competitor of coal it will be a constantly diminishing factor because of its products being applied to higher uses. This holds good so far as consumption of oil under boilers is concerned. It does not hold good as to consumption in the Diesel type of engine, where one-fourth of the quantity of petroleum will pro-

duce practically the same amount of power as can be produced by burning it under boilers for the generation of steam.

Has scientific search for oil by the geologists made the finding of new fields so easy as compared with the early-day haphazard methods, that the fields will all be discovered in a comparatively short period of time? Must the petroleum industry undergo continuous turmoil because of these new fields which add unneeded quantities of petroleum to an already over-stocked market? Will this turmoil within the petroleum industry finally give way to national turmoil, due to inability of the industry to meet the demands of the future? Must the industry be constantly exerting every effort to increase consumption in order to find a market for the unbalanced production? It is obvious that there should be some means devised for controlling excess production. To-day there is no method of coördinating production with consumption. We produce oil in totally unjustified quantities, sell quantities of it for fuel purposes that should be conserved for use as gasoline, Diesel oil and lubricating oil. Incidentally, we displace between 75,000,000 and 100,000,000 tons of coal annually. The injury is twofold; first, the waste of petroleum that should be conserved for higher uses; second, the demoralization, in part, of the coal industry that needs markets to-day as never before. Control of production and discovery of new fields are the two fundamental problems of the petroleum industry.

The most important problem connected with the petroleum industry concerns the extent of the



reserves and the rate of consumption. As to the rate of consumption, we can form fairly accurate estimates based upon past experience. As to reserves, we face a never-ending struggle between individual and corporate greed upon the one hand, and the unbiased observations of scientists upon the other, who deprecate the frenzied effort to produce the maximum quantity in the minimum time. That the industry is not wholly sure of its ability to satisfy demand, from domestic production, is evidenced by the scramble for foreign sources of supply. This is an activity in which we have to date been largely out-generaled by our English cousins, who, lacking domestic supplies of their own, have for years been reaching out for the supplies of the world,—an entirely laudable and justifiable procedure.

There are available many foreign sources of supply, some of which are under American ownership. To what extent these can supply future demands is problematical. Judging from the history of Mexico's yield, the outlook is not very encouraging. Mexico became an important factor in the petroleum industry in 1915 and reached its maximum production in 1921. In other words, this great reserve has been developed, reached its peak and declined within a period of less than 10 years,—a pitifully short time compared to national life.

The United States has, within its borders, enormous reserves of oil shale. Oil from this source will be available, but at a price per barrel of probably not less than four to six dollars. Supply from this source of the quantity of oil, now being consumed in the United States, would require the building up

of a mining industry that would produce a daily tonnage more than double that now being produced by the coal industry;—obviously a task requiring years of time and a shifting of millions of people from their present locations to the oil shale regions of the West.

The products of petroleum in the form of gasoline and lubricating oils have become a public necessity of first importance. Our whole social structure has been modified by the development of the internal combustion engine. We live miles away from our places of business. Real estate values, the expansion of cities, rural conditions generally, have all been profoundly affected by the automobile. Failure of the industry to meet the future demand for gasoline, thereby unsettling these conditions, will bring forth a vituperative outcry such as has never been leveled at any industrial group in the United States.

Can intensive coöperation between the government and the industry be productive of any results nationally beneficial? Certainly it is worth the effort, although the past history of the government's attitude towards the petroleum industry offers little encouragement. It has been characterized by ignorance and despotic attempts to set aside approved practices of generations. The history of the Naval Reserves in California during the period 1912 to 1920 is a tragic tale of misdirected effort. Treated in utter ignorance, swayed by suspicion of the industry's good faith, the government lost an opportunity to conserve for naval use, a very large quantity of petroleum. Fired with the valor of ignorance,

animated with a spirit of suspicion and distrust, the Navy Department conducted a campaign that, had it attained its objectives, would have dishonored the good faith of the United States by making its solemn promises in the form of United States patents mere scraps of paper. Prominent attorneys, authorities upon American mining law, publicly stated that the success of the effort would mean nothing less. History will record that the effort failed, and because of the blind obstinacy of unintelligent officials the naval reserves were largely lost. Constructive efforts at solution of the problem upon the part of the industry were met with curt refusal of consideration. Little heed was given to the fact that through prior ownership much of the land was being operated under titles admittedly impregnable and that continuance of such operation must inevitably drain the naval reserves.

The efforts of Franklin K. Lane, then Secretary of the Interior, to effect a satisfactory solution, were nullified. The whole picture is one of a punitive campaign undertaken in ignorance, with results highly detrimental to the nation's interests. Not alone have naval reserves been lost that might have been saved for government use, but the petroleum industry has come to look with suspicion and distrust upon all government activities directly affecting it. If it is not possible in the future to have a different type of relationship, it is devoutly to be hoped that government will stand aloof and permit the industry to render its service as best it may. The petroleum industry, if left to its own devices, can far better serve the public than under such super-

vision as has been in evidence not only in the matter of the California naval reserves, but in the relations existing between the industry, Congressional investigation committees, and the Federal Trade Commission.

The lack of proper relationship is of course a national tragedy of first magnitude. We can well say of it, "so much to do, so little done." Out of it all some day, somehow, there should emerge a great national policy, as related to petroleum, that will have for its fundamental thought helpful co-operation rather than destructive criticism, that will be administered by men able intelligently to handle the problem on behalf of government and who by wise administration will make it possible for the industry the better to perform its allotted task.

### *Natural Gas*

One of the great sources of heat, light and power is natural gas. It has about twice the heating value of manufactured gas. Man, with all his skill, has never been able to make a commercial product equal to it in quality. There has been no natural asset of the United States more wantonly wasted. The history of the industry is an appalling record of almost unbelievable waste. The methods of production, distribution and use have resulted in wasting more gas than has been consumed. A survey made during the war, in 1918, showed that over 800,000,000,000 cubic feet of gas per annum was being wasted. On the basis of what it would cost to

replace this natural fuel with manufactured fuel, the money value of this waste amounted to more than one billion dollars a year, or nearly three million dollars a day.

Failure on the part of the public and the gas companies to appreciate the permanence of the loss, and the value and cheapness of the product, has made this waste inevitable. Invisible and without distinctive odor, the people have failed to appreciate the extent of the waste. Devices for measuring the natural gas flowing from the well have not been generally used. As a result, many companies have operated without any definite information as to the amount of gas that was being wasted between the field and the consumer's meter. The very cheapness of the product has been the cause of this waste. It has been shown that the only way to obviate it is by making it dearer and therefore worth conserving.

More than 10,000,000 people are dependent upon natural gas for their cooking, heating, and lighting service. Of all the gas sold in the United States for public utility purposes, almost 70 per cent of it comes from the natural gas wells.

This same war-time investigation showed that it was a common practice in communities to burn street lamps day and night. Eighty million feet of natural gas was found to be wasted daily in West Virginia in the manufacture of carbon black, 50,000,000 feet of which could have been turned into public utility lines. In West Virginia numerous consumers have free gas privileges on account of having gas lines or gas wells on their farms. Some of these free consumers, having no other use for their gas,

erected standpipes and wantonly burned it day and night. It was found that the average consumption per free consumer per year was 480,000 cubic feet, with a waste of at least 350,000 cubic feet. There are more than 4,000 free consumers in West Virginia, and at this rate the waste in this one item alone amounts to 1,400,000,000 cubic feet a year. The over-drilling of town lot areas is another fruitful source of waste.

During the recent frenzied production of petroleum in Southern California, due to the discovery of the Santa Fe Springs, Signal Hill and Huntington Beach fields, it is estimated that enough gas was wasted daily to supply the city of San Francisco for a period of two weeks. This waste has continued for two years. Properly conserved, it would have supplied a city the size of San Francisco for approximately thirty years. Translated into terms of money, this gas at the price paid by the consumer would have a value approximating one-half billion dollars. It has been dissipated in the atmosphere, never to be recovered. The fact that the government permits such waste is an indictment that cannot be successfully defended.

Temporary production exceeding the demands in one West Virginia field, two four-inch pipe lines were laid on a hillside and were permitted to discharge at least 5,000,000 cubic feet of gas daily into the air. Not alone was the gas itself wasted, but the gasoline which it carried in considerable quantities also was lost. Gasoline from natural gas is of an exceptionally high gravity, and is used as an enriching agent for making lower grade materials suitable

for motor fuel. To the extent, then, that it is lost, we lose the use of other large quantities of material that through its aid might be made a valuable product for automobiles.

In one instance, after four months' intensive town lot drilling, the rock pressure in the field had declined 70 per cent, the gas supply 75 per cent. The government has taken no constructive part in checking this waste. Whether it will in future realize the mistake and attempt corrective measures, time alone can tell.

With increasing demands from domestic consumers, the industry faces declining supply, with a constant increase in the price of the product. Demand by the government that the leaky gas mains now so obviously a source of waste be replaced or repaired would not be unreasonable. One examination of this condition under the supervision of the Bureau of Standards, showed that only 40 per cent of the gas turned into the lines reached the consumer. Investigation of the cause revealed gas mains so honeycombed with holes that they might well have served as sieves. The ordinary gas range wastes 85 per cent of the gas delivered to it, the ordinary coal furnace burning natural gas, 75 per cent. The difficulties cannot be overcome save through establishment of an adequate price, that will make the gas worth saving, legalizing unity of action in production, so as to permit consolidation of future operations, general introduction of gas measuring apparatus to check input and output of main lines, and the use of more efficient appliances by the domestic consumer. Already the natural gas industry is

beginning to feel the pinch of declining reserves and is in a transitory stage from large volume at low price to small volume at higher price.

The report from which the above statements have been excerpted was made in 1918,<sup>1</sup> since which time Government has done nothing to obviate this evident and inexcusable waste of one of our great natural resources. Proper regulation by government and intelligent coöperation can do much. Government activity of any other type is worse than useless.

### *Copper*

Since the development of the porphyry copper deposits between 1900 and 1910, there have been no new deposits of any magnitude added to the list of producers. Development of the porphyry deposits was not due to the discovery of new mines, so much as to the economic conditions that made possible production and sale of copper upon a scale never before undertaken. Copper had been known to exist in Bingham Canyon, Utah, for many years prior to its development by the Utah Copper Company; the property had been examined by numerous engineers, and rejected because of low grade of the ores. The occurrence of copper in the Robinson Mining District, Nevada, had been known for at least 30 years prior to the development of the Nevada Consolidated Copper Company. The Ray, in Arizona, had been developed by an English com-

<sup>1</sup> Report on National Gas Conservation Work, Bureau of Oil Conservation, Oil Division, U. S. Fuel Administration. S. S. Wyer.



pany years before the American company took it over; and Chino, in New Mexico, was an old mining camp at the time it was exploited as a porphyry copper camp. The Globe district in Arizona, where the Miami and Inspiration Companies are operating, was worked for years by the Old Dominion Company prior to the development of the Inspiration and Miami properties. Ajo, in Arizona, had been known for many years prior to its entering the list of producers. Bisbee was a discovery of the early '80's. It is a noteworthy and significant fact that all of the great group of porphyry deposits that have so materially added to the output of copper in the United States, are in mining districts long known to the prospector. Practically all of these properties had been located and held for years prior to their final exploitation.

We are justified, therefore, in saying that during the last quarter of a century, there has been no new copper district of importance discovered in the United States, excepting Alaska. The producing areas in Michigan and Montana, as well as the Clifton, Morenci, and Bisbee districts of Arizona, were in full production prior to the development of the porphyries. Development and equipment of these porphyry copper deposits obviously followed the law of supply and demand. That the equipment is now greater than justified by the normal consumption, is due to the demand caused by the World War, and in lesser degree to the desire to extract the maximum quantity in the minimum time. The development of these mines would not have been justified in the period between 1870 and

1900 because the flood of copper would have swamped the market. Copper mining would have become unprofitable, capital invested would have faced serious loss; years would have been required to balance the supply against the demand. The period of new development between 1900 and 1910 finds no subsequent or previous duplication. Prospectors have since then without success raked the arid West in an endeavor to discover new deposits. Nothing has been brought forward that in any way offers hope of very greatly increasing known reserves of porphyry copper deposits, and the duplication of these deposits, within the territory of the United States, seems highly improbable.

We face, apparently, the necessity of continuing to draw our copper from the known mining districts within the United States, with little probability of being able to add very materially to this already fairly well-defined tonnage. In the meantime, South America has developed some very large copper properties. The Tanganyika concession in Africa has great reserves, but these properties are quite outside the limits of the United States, although it has been American capital that has developed the Cerro de Pasco, the Braden, and the Chile Copper Company's deposits. No better example of the need of a fixed foreign policy exists than in connection with these great South American copper mines owned by American capital.

Our consumption of copper has risen from 357,000,000 pounds in 1900 to 732,000,000 pounds in 1910; 1,137,000,000 in 1915; it declined to 897,000,000 in 1922. The decline in 1922 is due to the cessa-

tion of war demands and the inability of Europe to buy and pay for the copper normally needed by her industries. Comparing the output of 1918, the high point of the war, of 1,909,000,000 pounds, we find that the copper industry has been tremendously over-expanded. The decline in consumption is a perfectly good example of the interdependence of international industries. Over-expansion due to war demands has produced a condition that makes co-operation within the industry desirable in an effort to eliminate the unneeded surplus. Such action should have the hearty approval of government.

Estimates of reserves of unmined copper ore in the United States can be made within fairly reasonable limitations. A detailed presentation would be of little utility in connection with this discussion; suffice it to say that the reserves are far from limitless and that another 50 years will have exhausted the larger part of them. All indications at the present time point to the necessity of drawing upon foreign countries rather than relying upon the chance of new discoveries in the United States. The mines of Michigan are from 3,000 to 5,000 feet in depth; Butte, Montana, is working below the 3,000 foot level. These statistics should bring the government to realize the necessity of rendering every assistance that will lead to rational conservation and greater efficiency in the utilization of these reserves. It is quite true that temporarily there is an over supply; it may continue for a year or for several years. The period in comparison with the national life is insignificant.

*Iron Ore*

Our deposits of iron ore are probably the greatest in the world, representing perhaps 44 per cent of the world's total, but even at the rate of our present consumption there is a known reserve sufficient for only two hundred years. If we double the rate of consumption, we cut the period to one hundred years. We are to-day importing large quantities of iron ore from Cuba. The reason is purely economic in that the ore can be mined, shipped by vessel and landed upon the Atlantic Seaboard, where the blast furnaces are located, at a cost below what is possible with our own ores.

Iron ore production has risen from 3,832,000 tons in 1870 to 16,000,000 in 1890, and 47,000,000 in 1922. In other words, in approximately 50 years our output of iron ore has increased thirteenfold. If statistics are to be relied upon, it is the duty of the government to encourage American nationals in every way in acquiring foreign sources of supply. To do this may require coöperation to an extent not yet attempted. If so, the government should assist in every way in making that coöperation successful to the end that national welfare may be the better served. The basic fact, however, is that we are the largest consumers of iron in the world, and our industrial life depends in large measure upon iron products. Our government policy should be so shaped as to anticipate events a century or more ahead and make it possible for the industry to render adequate service when called upon.

*Lead*

In lead mining there has been no new discovery since the development of the Coeur d'Alene district in Idaho in the early 90's of the last century. Old districts have added new tonnage through deeper workings and development of ground less attractive than that first exploited; but so far as the finding of a new district is concerned, it simply has not been done. Of the old districts, the most important are the southeastern Missouri disseminated lead district, starting in an important way about 1870; the Coeur d'Alene discovered in 1885; and the Joplin (or tri-State) district of Missouri, Kansas, and Oklahoma, long known but reaching importance as a lead producer in 1916 when the Picher region began its great development. In the face of mounting demand for lead, copper, zinc, we continue to draw upon mines that have been yielding their product from 1870 or 1875 up to the present time. Some of them have been practically exhausted, but are still producing small amounts, spasmodically, under the leasing or tribute system; others have reached their maximum output and are declining; while still others have not yet reached their maximum output. Some of the latter are in the old mining camps and were developed at considerable depth and at a capital expense that was not justified, so long as the more easily worked deposits were available. The United States now ranks as the chief producer and consumer of lead in the world. Our production in 1910 was 375,402 tons; in 1920, 476,849 tons.

If there is any coöperation that the government can give that will in any way encourage the acquisition of foreign deposits, or more efficient utilization of those we have, it should be forthcoming. As with the other metals, we face increasing demand with decreasing supply. The west has been raked by prospectors for years, with little added in the way of new deposits.

### *Gold-Silver*

That we must have gold from some source has been fairly well proved by the deluge of paper money, which, during the last five years, has flooded Europe and has made the Russian ruble and the German mark entirely without value. The fantastic figures used in quoting these two forms of money, in comparison with the American dollar or the English pound, illustrate the utter futility of expecting the printing press to become a satisfactory substitute for a gold reserve. Yet we have seen in the United States, in times past, demands for fiat money; we have experienced, during the past war, inflation of our currency; and some of us have vociferously objected to the post-war deflation, even to the extent of demanding uninterrupted operation of the printing press in the manufacture of paper currency. Ignorant of the inevitable results of such a financial debauch, some of us still demand unlimited printing of paper money, although to even the most obtuse it must be evident that our financial structure must rest upon a foundation far more stable than an unsecured promise to pay.

We have, in the United States, found no new deposits of gold or silver ores of any considerable significance since the discovery of the Tonopah-Goldfield mines between 1900 and 1905. Prior to this there had been nothing of any importance found since the Cripple Creek discoveries in Colorado in 1891. It is a fact also worth recording that there has been no duplication of the great South African gold field first worked in 1885. As a matter of fact, all of our great mining fields were discovered prior to the twentieth century, although some of them were not worked prior to that time for purely economic reasons.

Production of both gold and silver, save as by-products, has been adversely affected by rising prices of all commodities. The value of gold is fixed; the value of silver fluctuates. In terms of the purchasing power of the dollar, gold to-day is worth approximately 65 per cent of its pre-war value. The contents of the gold veins remain unchanged. The result has been that many gold properties are being worked at little or no profit; many have been forced to close. The same is applicable to silver which is selling to-day for a price little above the pre-war level. It has been proposed to stimulate artificially the production of gold by means of one sort and another, all with no economic justification.

### *Raw Materials Not Produced in the United States*

Notwithstanding our abundant endowment, there are minerals of very great importance which we

lack. We have no tin deposits; our supplies of nitrates must come from Chile; manganese ore, so necessary in efficient blast furnace operation, must come from Brazil. Germany, before the war, had the only known deposits of mineral potash in the world. It was the possession of these deposits that gave Germany a leverage of tremendous industrial strength. Under the Cartel system, with government coöperation, these deposits were calculated upon as of prime importance in future world supremacy. The sisal or hemp, without which our wheat crop could not be harvested, comes either from Southern Mexico or the Philippines,—climatic conditions preclude its production in the United States. We lack any supply of platinum. We must import palm oil from the Congo if we are satisfactorily to coat the sheet iron plates with tin, for the manufacture of tin cans to be used in our food preserving industry.

Let us stop for a moment and consider the significance of our lack of the two important raw materials—tin and palm oil. The value of our annual output of canned goods in the United States approximates 639 millions of dollars. The industry embraces almost every article of food,—the salmon of Alaska, the fruits of California and Florida, the tropical products of the Hawaiian Islands. There is no satisfactory substitute for tin. The tin, in turn, must be treated with palm oil, the one coming largely from the Straits Settlements or Bolivia, the other from the jungles of the Congo.

Among the products that the United States imports is manganese. Essential in steel manufacture,



this mineral exists in the United States in relatively insignificant quantities and only of very low grade. Brazil is the great source of this material, and one of the important war activities was to assure the continuity of supply of Brazilian manganese to the blast furnaces of the United States. Germany, which was consuming approximately sixty pounds of manganese per ton of steel produced prior to the war, is now without a supply of this important steel alloy due to the return of Alsace-Lorraine to France.

In the relation of government to industry, our mineral reserves present a distinct problem. They are wasting and irreplaceable assets; once exhausted, there is no possibility of replenishing them. There arises, therefore, a paramount necessity for conservation. Our different mineral products, however, require different treatment. We could find no justification to-day for conserving our granite, clay, or limestone deposits, but conservation of copper, lead, and petroleum, is of vital importance even now.

The problem of conserving our mineral resources affords the greatest of all opportunities for constructive coöperation between government and industry. The prime object of the mining industry is to produce and market the maximum quantity in the minimum time. The present value of a mining property equipped to produce 2,000 tons a day for 10 years is much greater than if equipped for the production of 1,000 tons a day for 20 years; just as the present value of a dollar payable in 10 years is greater than that of a dollar payable in 20 years. The attitude of the mineral industry to-day is one of feverish activity in producing and marketing

its products as rapidly as possible regardless of the interests of posterity. The interests of the individual, or the industry, and that of the government are in conflict, as the government's purpose is best served by the least production commensurate with national need. Certainly artificial stimulation has no place in the government program. Industry, on the other hand, is constantly endeavoring in every way possible to stimulate consumption.

The fact that no nation is self-contained in its requirements for raw materials, is one that we must keep ever before us in the United States. It is true that in the amount and variety of mineral output, in the extent of our unmined mineral wealth, the United States stands preëminent. It is the possession of these resources that has made it possible for the United States to achieve her tremendous industrial growth, and should enable her, under wise and far-seeing statesmanship, to become not only the industrial leader of the world, but the guardian of the peace of the world as well. Future warfare depends upon industrialism for success; industrialism in turn depends upon ample supplies of raw materials. The United States has, in its developed and undeveloped mineral resources, a lever that properly applied will go far in keeping the world in the paths of peace, regardless of the wish or will of rebellious nations seeking to overrun the earth.

The government has been content in the past to allow the economic law of supply and demand to regulate fluctuations in price; in fact, to regulate industrial activity. The World War clearly showed

that conditions might arise when this law could not be relied upon because of the sudden demand, and vital necessity for an extraordinary supply that was not in storage. A similar shortage in our mineral supply, due to exhaustion of deposits, will occur sooner or later, but with this difference: we shall not have an unmined reserve to draw upon. The policy of regulation should be: provision for reasonable supply without waste over the longest possible period at reasonable price, the hazards of the industry being duly considered.

In the light of statistics showing our rapidly increasing consumption,—broadly speaking, doubling every twenty years,—it is obvious that only the most efficient methods of production and use should be tolerated by the government. But our government is not at present so constituted as to administer properly this regulatory control. There should be created a board of commissioners to formulate rules and regulations to control the extraction of our mineral products. The board should be composed of specialists who have spent a lifetime in mineral production and are recognized as authorities. They should be empowered to authorize the enforcement of such regulations, but every effort should be made to maintain a completely sympathetic and harmonious coöperation between the board and the industry. Industry should be fully consulted in formulating the rules and regulations; its experience, information and judgment should be utilized to the fullest extent. This board should also suggest to Congress our policy regarding American ownership and importation of foreign mineral

products. We have an Interstate Commerce Commission that supervises our railways, a Shipping Board which has the power to suspend the operation of the anti-trust laws, fix rates and regulate pooling and trade agreements. Why not have a commission to deal with our mineral resources, upon the wise and efficient use of which our future welfare depends to a degree which is of vital importance. Without ample supplies of mineral products the whole fabric of modern civilization must suffer a radical setback, yet our government is making no adequate effort to conserve their use. A commission such as suggested is much more needed than the Interstate Commerce Commission, the Federal Trade Commission, or the Federal Reserve Board, for without adequate supplies of minerals our industries will go to smash and the business of the above commissions will be confined to academic discussion.

### *Recommendation*

In view of the above, it is recommended that the Congress of the United States create a commission to be known as the

## MINERALS COMMISSION

That to this Commission be submitted the task of considering the problem of conserving the mineral resources of the United States, devising a policy for this government to adopt with regard to foreign sources of supply; that this Commission plan years

in advance, and that it submit annually a report to Congress with its recommendations for necessary legislation.

That the members of this Commission be selected from men eminent in the various mineral industries; that each be a recognized authority and successful administrator; that they be so selected as to represent separately the more important mineral industries; that their terms of service be for long periods, so that they may become thoroughly familiar with the problem of raw materials in all its phases; that the Commission be absolutely non-political,—the best men being selected without regard to party affiliations. Unless such a Commission be so organized, government had best allow matters to continue as they are. No better example of the futility of political control can be cited than the numberless congressional investigations of the petroleum industry that have caused the expenditure of millions of dollars without one single constructive result so far as aiding in the solution of our petroleum problem.

## CHAPTER VII

### SIGNIFICANCE OF TRANSPORTATION

IN dealing with the problems of railway transportation there are two considerations which must be kept in mind:

- 1st: Agriculture and industry as to-day constituted cannot function properly if adequate railway facilities are lacking.
- 2nd: The ton mileage of our country doubles approximately every 17 years. Additional capital is therefore needed each year for extension and betterments. The amount necessary has been calculated at not less than \$750,000,000 to \$800,000,000 a year. If this capital is to be obtained, safety of the investment and reasonable return upon the capital must be fairly well assured.

If we accept these propositions (and even the most rabid agitators will hardly deny their truth), it follows that it is to the interest of every man, woman and child in the United States that our railways be so maintained and operated as to render maximum service at the least possible cost. To argue that such service is possible under government ownership and operation, is to ignore the overwhelming mass of testimony which has accumulated throughout 2,000 years of experiments in paternalism. If to this we add the experience of

foreign nations during the last few decades, and cap the whole with our own experience in government operation of railways during and after the war, we shall assemble a mass of data overwhelmingly adverse to government ownership.

The era of pioneer railroad construction and operation in the United States is part of the historical past. Any attempt to predicate present-day relations between the government, the public, and the railways on the history of that period is futile. A continuation of the punitive attitude of the government, the outgrowth of that period, will mean the loss of benefits which may be derived from proper application of past experience.

The people have already decreed regulations which prohibit the repetition of past mistakes. It is of the highest importance, therefore, that we do not permit our present-day relations with the railways to be tinged with distrust or hatred because of the occurrences of past decades.

Much has been said in the past of the public ownership of railways in Europe. Arguments without end have been made in favor of government ownership in the United States, especially quoting from the German experience. German railways were and are state owned. They were well run prior to the war, but there is no parallel to be drawn between them and what public ownership would be, and might accomplish, in the United States. The reason is simple. German railways were consolidated under state ownership by Bismarck. His object was purely political. The railways were built and operated primarily for the purpose of facilitating German troop

movements in time of war. The profits were used to build up the military machine. In short, German railways were part of the German plan of military mobilization. The German government, up to 1918, was to all intents and purposes a military dictatorship. The people had no important voice in the government, certainly not in the operation of the railways. The railway officials were practically military officers under military discipline. Unions of railway employees were prohibited. Asking permission of the people to perform any act was the last thing thought of. A Prussian state railway official on being asked what would happen if the railway employees should form a union, replied: "They would be ordered to their colors. They would then be directed to return to work. If they refused, they would be shot for mutiny." In France a few years ago (1910), the threat of a national railway strike was countered by proclamation for general military mobilization. And the Premier who issued the order was a socialist! The conditions are so different from ours that no parallel can be drawn with any justification.

The United States and Great Britain are the only countries where government ownership and operation is negligible. It is interesting to note that the railways of these countries rank as the premier railways of the world. Yet in the face of this, there is a well organized and continuing propaganda that has for its objective, government ownership and operation. All experience indicates that government ownership in any country is inevitably followed by greatly decreased efficiency per man and enormous



increase in the number of men employed, with consequent increase in operating expenses.

Continual attacks are made by politicians upon the salaries paid railway officials as the reason for the exorbitant rates charged. Yet it is easily demonstrated that under government control any reduction in salaries would be many times offset by the wages of the increased number of men employed. The public in the end would, of course, be the one to suffer. Rates would inevitably have to be raised, the sum total of the experiment would be failure. Exorbitant salaries to officials have caused much virtuous or mock indignation upon the part of political agitators, who speak of the condition as the "unconscionable looting of the public" entirely regardless of the facts. So that there may be no doubt about relative costs, the statistics had best be consulted. These show that the total salaries of all officers, those drawing large salaries and those drawing small salaries, is only about 2 per cent of the total operating cost. Experience in this country and abroad clearly shows that under government ownership the number of employees would be increased, especially officers, positions for whom would be created without justification. Any saving made by reducing salaries would undoubtedly be more than eaten up by adding more "favorite sons" to the payroll.

The National Civic Federation<sup>1</sup> in its report (page 25), laid down the principle that exclusion of political influence and personal favoritism was a pre-

<sup>1</sup> Samuel Gompers was Vice-President of this organization and speaks in commendation of it in his Autobiography.

requisite to successful government operation, and pointed out the danger from a body of public servants unified for voting purposes. This is exactly what would confront us if we adopted a policy of government ownership and operation. Political consideration would always be in evidence, every senator and congressman would demand additional construction in his district, every town would want a million-dollar depot. We should, in short, revert to the worst days of the "pork barrel." Railways would become local issues to be pulled and hauled for the particular advantage of each congressional district regardless of economic considerations. The result can be imagined.

Study of the situation leads to the conviction that railway officials have a heavy responsibility resting upon them in their relation to the public; they must be guided by due regard for the public interest, consideration of which is equally as important as satisfactory earnings. The fact that this responsibility was not recognized, or not assumed in the past, was the fundamental cause of much of the public antagonism made articulate in the form of punitive governmental regulations. Full recognition of this obligation in the future will do much towards eliminating the danger of government ownership, than which there is nothing that could be of greater national detriment. Failure to recognize this obligation may well be the entering wedge of public ownership.

The railways of the United States are the arteries that make possible our agricultural and industrial life. Steam, the foundation of modern civilization,

finds its greatest significance in the development of the locomotive. Railway service is fundamental. Render that service inadequately and we embarrass industry and agriculture; cripple it and we cripple agriculture and industry; destroy it and we destroy modern civilization. Without our railways, the products of the soil and the mine could not be moved in the quantity we have come to regard as essential to modern life. The cost of moving products to great distance would be such that only the rich could buy, and for this reason the poorer classes would suffer first, and most acutely, just as they always suffer in times of distress and dislocation of national activities.

It will not suffice that the government and the public adopt an intelligent policy towards the railways. Railway management in its turn must adopt an enlightened, responsive and wise attitude in its policy towards the public and the government. In the main, this is now the case. Most railway officials realize that their position is one of trusteeship; that the justification for private ownership is better public service than under public ownership; that successful competition is not the test that should make improved service necessary and that the state of the public pulse is quite as important a factor in successful management as reduction in costs per ton-mile or higher maintenance and operating standards. Most men recognize these fundamentals and freely admit them; those, here and there, who still cling to old traditions, had best be ignored in behalf of general harmony and progress.

In the past our great waterways were the signifi-

cant factors in the migration of our people; they afforded the most satisfactory and efficient means of transportation. Cities were built upon their shores and thrived and expanded because of the ready means of communication that the lakes, the rivers and the sea afforded. The whole fabric of commerce and industry was predicated upon adequate water transportation. Canals were built connecting waterways and districts remote from river transportation. The territories along the seaboard and adjacent to the navigable rivers became the centers of population. The Inland Empire, the great prairies of the west that stretched from Pittsburgh and Buffalo on towards the Rocky Mountains, were inaccessible save for the facilities afforded by the Mississippi, the Missouri, and their tributaries, and the Great Lakes.

It was not until 1840 that the railways began to affect industrial and commercial relations. By that time, nearly 3,000 miles had been constructed. This had risen in 1850 to 9,000, and in 1860 to 30,000 miles. The first transcontinental link was completed in 1869. The seemingly impossible had been accomplished. Deserts had been crossed, rivers bridged, mountains tunneled, and the Atlantic linked with the Pacific. The transcontinental journey was made in seven days; the great West was opened; the building of the modern industrial structure had begun. By 1880 there was more than 90,000 miles in operation; by 1890, 163,000; in 1900, 193,000; in 1910, 240,438; and in 1920, 254,000 miles. From small disjointed units a few miles in length, there grew up through this period of years consolidations

that knit these disjointed parts into the great systems of to-day.

As we look back upon that pioneer age, we see the whole industrial fabric of the nation unfolding before us. It was the period of transformation from the transportation facilities that had remained practically unchanged for thousands of years, to the modern system that was to alter national boundaries, profoundly affect the growth of population, and make possible modern civilization, so markedly characteristic of the last century. The spirit of American individualism was never more in evidence. The courage of the railway pioneers, their willingness to do and dare, is typical of the best traditions of American manhood. These people were the bone and sinew that built the railway facilities of the nation; because they have passed, the nation is the poorer. They labored under enormous handicap, doing the best they knew how, but somehow, somehow, somewhere, putting forth that individual effort that over the last century has conquered the West and developed its natural resources for the benefit of humanity.

American railway history divides itself naturally into four parts; the pioneer stage of unrestricted competition; the period of punitive government interference; the period of government operation, and the period of better understanding by both the government and the people. We have largely passed through the first three stages and are apparently upon the threshold of the fourth. It is highly important that the government, the public and the railways so coöperate and harmonize their mutual

interests as to produce in the future the conditions so necessary for national prosperity.

The period of pioneer effort is always a time of turmoil, instability, and mistakes. It could not be otherwise. It is an era of experimentation, of cutting and fitting, in an effort to produce industrial machinery that will meet public need. It was so with the railways. Their early history is a curious exhibition of virile Americanism that was impatient of any and all obstacles, and that accomplished the seemingly impossible. Because of their great public need; because of the necessity for legislation to make possible the building of the railways, the management was soon forced into the political arena. Quick to grasp the significance of the need, unscrupulous and corrupt politicians made demands for recognition that ultimately resulted in an orgy of corruption. Despairing of intelligent public support, railway management plunged into the political maelstrom and set a course that was to lead eventually to the tribunal of the Interstate Commerce Commission.

The use of railway passes, issued for political purposes, was common practice; political leaders were supplied with great numbers of passes, to be dealt out as they saw fit. In the very early days of railway construction, stock was distributed where it would "do the most good," cash bribes were paid for necessary services, proper and improper, that could not otherwise be obtained. No effort was spared to control public officials. Public officials in turn looked upon the railways as the never failing source for political contribution.

We were passing through an industrial revolution, the greatest in all history, and like all revolutions it was marked with violence, bloodshed, and crime. It was the period of free and unrestricted operations of railways; the period when railway managers considered any public regulation as an infringement of individual rights, to be met and combated as the extreme of radicalism. Gross favoritism was in evidence on every hand. Freight rebates to favored customers, special privileges of one kind and another, reduction of rates overnight to permit shipment of certain favored tonnage and restoration of rates the next day, to shut out competitive shipments, all this was part of the game. The evils were so glaring that a spirit of hostility upon the part of the public was the inevitable result. As a free people we did not propose to tolerate such industrial despotism after having freed ourselves from the despotism of King George III. To the disapproval of thoughtful citizens was added the anathema of the disillusioned settlers of the west who had discovered that the railways had not produced the millennium so fondly hoped for. Utopia did not march hand in hand with railway construction; financial salvation was still to be attained only through work. The disillusionment, in part, took the form of the Granger movement, the forerunner of the turmoil and strife that for almost 50 years was to mark the relationship between the railways and the public.

By 1880 the public was beginning to see dimly that certain types of industrial effort having to do with public service could no longer be permitted untrammelled freedom of action. As in the case of

the railways, political interference, corruption and the whole undesirable chain of evils was found in the activities of companies supplying our great cities with water, gas, and street railway transportation. The creation by the states of public service commissions, under various names, was the final result of efforts to counteract these evils. They have proved quite as effective in protecting corporations against political attacks by unscrupulous politicians as in protecting the public against the rapacious demands of the public service corporations.

The history of this pioneer period contains ample proof that industry unaided by government cannot purge itself of corrupt, vicious, or undesirable practices. The individual of low moral character who has had such baneful effect upon industrial standards cannot be eliminated by industry save with the help of government. It is unfortunate that in the past the function has been exercised so infrequently and so badly. Years brought no relief from undesirable practices. Legislation of one sort and another was proposed to cure obvious evils. In retaliation railway lobbies invaded the halls of Congress, sparing neither time nor money to defeat the proposals.

The rising tide of public wrath, quietly supported by far-seeing railway officials, resulted at last in the passage of the Interstate Commerce Act in 1887. If railway officials had been wiser, if their vision had been broader, the Act might have been materially altered for the benefit of all concerned. It is regrettable that the railway managers of the period did not realize the necessity for coöperative action and join in recommendations that, translated into law,



would have made possible a much more satisfactory type of control than was created under the Interstate Commerce Commission. It must be recognized, however, as a definite step in advance. With the passage of this Act, there was definitely closed the first period of American railway development. Pioneering, with all its vicissitudes and turmoil, its unrestricted freedom of action, had passed.

The Interstate Commerce Commission undoubtedly removed many evils growing out of unrestrained railway competition. Its activities in formulating a standard system of accounting, its control of rates and other activities, was of highest national importance. There is, however, no gainsaying the fact that contemporaneously with the correction of these evils, a condition of uncertainty was produced that had a deterrent effect upon the construction of additional railway mileage. The spirit of public hostility did not cease with the creation of the Commission, and there was nothing in the Act that gave assurance that satisfactory return upon the capital invested would be permitted. The result was, of course, that it became difficult to procure capital in sufficient quantities and at reasonable rates. The public in its attitude of hostility was yet to learn that its prosperity rested primarily upon adequate railway facilities and that if these facilities were to be forthcoming there must be established a relationship founded upon mutual confidence and respect.

At this time when public confidence was most necessary, fuel was added to the flames by the avalanche of railway receiverships and reorganizations, the result of the vicious, criminal, and mis-

taken railway financing of earlier days. More than 70 per cent of the railway mileage of the United States has undergone receivership and reorganization. More than \$9,000,000,000 worth of stocks and bonds were involved in these proceedings; of this amount hundreds of millions were wiped out by reorganization. That the structure was wobbly, top-heavy, and in need of readjustment, is evidenced by the fact that subsequent to the organization of the Interstate Commerce Commission, 55 per cent of the railways of the country passed through receiverships, as compared with some 16 per cent previous to the organization.

We now come to the third period in the history of American railways, the period of government operation. The fundamental mistake made by the government in taking over the railways was the neglect to maintain in authority the Railway War Board. Placing at the head of the Railway Administration a Cabinet officer, already burdened beyond endurance with the cares and responsibilities of the Treasury Department, foredoomed the effort to failure. If the government had maintained in authority the Railway Board, if it had said to the men composing that body that they must operate the railways as a unit on behalf of the government, and if there had been delegated to those men the powers of government to make it possible for them to carry out their policies, the whole procedure might have found some justification as a war measure and have met with an amount of success not in evidence in the program as carried out.

Much has been said about the necessity for gov-

ernment control during the war period. It was said that there must be unification of facilities, interchange of equipment, elimination of the long haul in favor of the short haul, common utilization of terminal facilities, and similar explanations were forthcoming. Little has been said, however, of the underlying factor which probably more than any other one thing caused the government to assume railroad operation. Prior to the government's taking over control of the railways, it was common talk in Washington that railway rates must be advanced if the railways were to live. Bankruptcy stared them in the face unless such advance was made, and it was whispered about inner circles that this advance must be as much as 25 per cent. It was this fact, since little commented upon, that was perhaps the deciding factor, if not the only important factor, in causing the government to adopt the policy of railway operation. Advocates of government operation contended that the railways had become so congested that they were unable to meet the war emergency. A large part of this congestion was due to priority orders that fell thick as autumn leaves. Enthusiastic army officers, armed with them, rode car loads and train loads of supplies through to destination. They became so numerous that regular traffic was submerged and the functioning of the railway machine seriously interfered with. The army and the navy departments showed little conception of the complex interdependence of the various branches of industry, every one of which must function properly if the whole is to function satisfactorily. Like other paternalistic efforts of the

government, the attempt at amelioration by means of priority orders had exactly the opposite effect and created still worse conditions. Coupled with the necessity for a 25 per cent increase in railway rates, which were later still further increased, a situation was created that caused the government to adopt its final policy of operation.

If we look for the roots of the trouble with which the railways were plagued, it will be necessary to go back to about 1900. Commencing with that year there had been a constant increase in the price of almost all railway supplies and labor. Because of unwise government tinkering, it became impossible longer to finance additions and improvements, through sale of low interest bearing bonds, and more particularly through the sale of stock. This latter means of raising capital practically ceased to exist subsequent to about 1906. The result has been the creation of a top-heavy financial structure; a sort of a bond inflation period, resulting as inflation always does in the lowering of bond values and the discrediting, in considerable measure, of stock values. Rates remained stationary, prices advanced. The result was inevitable and culminated in railroad control during the World War. The chickens had at last come home to roost, and when the stress and strain came it found the railroads unprepared, just as it found the entire nation unprepared to meet the shock of war. We are paying the bill, due to unpreparedness, of course, and will continue to pay it for decades. Not the smallest part of that bill is the railway item.

It was not until 1914 that the Interstate Com-

merce Commission permitted any rate advances to balance these increased costs, and then permitted a totally inadequate advance of 5 per cent to the eastern roads. Again in 1917 a further advance of 15 per cent was permitted, this time applicable throughout all territory. That these advances were not enough to meet the needs of the situation is evidenced by the fact that with the assumption of government control and operation in January, 1918, a further advance of 25 per cent was made. It was the necessity for this latter advance that in all probability was the deciding factor that caused government operation.

As the result of the war we have had the experience of government operation. The result has been highly unsatisfactory. The public has been disillusioned; its opinion materially altered. The insistent clamor for government ownership and operation has diminished, there has been brought home to us through experience the realization that under such a system we should face conditions far more unsatisfactory than under private operation. The war clearly demonstrated many things, among them the inadequacy of the Sherman Anti-trust Law, and similar repressive legislation, in meeting modern industrial conditions, but in no particular was the lesson of this period more important than in showing the utter fallacy of government ownership and operation of railways, as a panacea for some of our alleged national ills.

No evidence more conclusively proves the unwisdom of nationalization of industry or governmental operation than that furnished by the period

of government control of railways from January 1, 1918, to March 1, 1920. Wage scales, established as a result of the combined experience of many years, were shattered, readjusted and increased with little consideration of the principles involved. Enthusiastic theorists, ignorant of actual railway operation, were given wide scope in applying their theories. An orgy of reclassification of employment was indulged in that produced ludicrous and financially baneful effects. The result of all is that only now, after almost five years of release, are the great railway systems emerging from the disorganization of governmental control, and again reaching their normal efficiency.

Space forbids any extended examination of the details of government operation, but there are a few examples that may serve to illustrate the chaotic condition produced. Wages were made standard all over the United States. This with utter disregard to the difference in living costs. Merchants in many parts of the country bitterly complained that such readjustment of railway wages demoralized labor in other lines of employment, because of the wide variation between railway wages, as adjusted, and wages paid by other industries. Employees were given thirty minutes a week pay allowance for punching the time clock when going to work. To the Southern Pacific Company alone this amounted to an annual increase of \$450,000 in the payroll.

The St. Louis Chamber of Commerce, in March, 1921, appointed a committee of five to investigate national agreements. The following statement shows

a typical question and answer in the course of the investigation.

"Is it true that under the present classification rules of the shop crafts, in order to change a nozzle tip in the front end of a locomotive, it is necessary to call a boiler maker and his helper to open the door, because that is boiler makers' work; to call a pipe man and his helper to remove the blower pipe, because that is a pipe-man's work; and to call a machinist and his helper to remove the tip, because that is machinists' work; also for the same force to be employed for putting in the new tip?"

Answer: "Full compliance with the national agreement requires the procedure outlined in the question."

Examples of the impracticable results of this classification are almost without limit. Under the Shop Crafts agreement, the railroads could not require shop employees to pass a physical examination when entering the service, nor could they require past references. The Railway Labor Board directed the railways to continue these rules and regulations in effect after the return of the roads to private control.

Senator Kellogg, of Minnesota, said in December, 1919:

"When the war broke out we had in this country, all in all, the best, cheapest and most efficient transportation system in the world. That it was not perfect goes without saying. But this is true, and will be conceded by substantially all the experts in the world, that nearly all the inventions, improvements of transportation facilities have resulted from

American inventive genius, energy and enterprise. An efficient and constantly growing transportation system is absolutely necessary to the very life and prosperity of this nation, and must be had to maintain the growth of the country. In the main, the present deplorable condition of the railroads is due to the inefficient and extravagant management and stupid bureaucratic control."

Senator Pomerene, of Ohio, in December, 1918, said: "I say as a result of a year's study of this problem that there has never been in the history of the railroads of this country as much extravagance and inefficiency as there has been under this unified control, no matter what the merits may have been; and there have been merits in the unified operation."

William J. Cunningham, James J. Hill, Professor of Transportation of Harvard University, makes the following statement in the *New York Evening Post* of January 20, 1921: "When the railroads were returned to their owners last March, the condition of equipment as a whole was worse than when Federal control began."

As a result of Federal control of the railways, the American people have very definitely altered their point of view. Believing, as many of them sincerely did, that government control and operation would more efficiently and more satisfactorily meet the public need, they have suffered a rude awakening in the practical testing of that theory. Service was found to be less efficient, wage scales were tinkered, with but little regard to the economic consequences; long tested and proved practice was unhesitatingly swept aside to give way to the theories of some



utterly incompetent individual temporarily clothed with governmental authority. It is small wonder that the public has definitely set its face against government ownership and operation of railways.

It is a fact beyond dispute that the railways when returned to their owners were in a materially worse condition than when taken over. Argument has been made that this was largely due to the fact that the railroads during 1918 were run with but one objective, that is, the winning of the war. But this does not suffice to explain the neglect of maintenance of plant and equipment during the year 1919 and the first two months of 1920, nor the great destruction of morale that took place, and that was so glaringly evidenced by the decrease in efficiency. It is contended, with good reason, that the efficiency of railway labor in general, under government control, was only 60 to 70 per cent of that prior to government operation. Since March, 1920, the task of the railroads, in the face of many obstacles, has been to bring plant and equipment back to normal. During 1920-1921 and part of 1922, the low level of net earnings rendered this task exceedingly difficult. The greatest economies in operation were necessary. Funds which might have been expended for additional facilities were used in repairing unserviceable cars and locomotives, and the restoration of right of way.

In July, 1922, the Railway Shopmen's Strike seriously dislocated the whole railway fabric. The work of gathering new forces of men was rendered difficult on account of improved industrial conditions, which caused a shortage of labor. The direct loss to the

railroads was certainly several hundred millions of dollars; to the public, probably more. The indirect loss resulting from inefficient work by inexperienced men was also very great. This strike was largely the outgrowth of the destruction of discipline and the general demoralization attendant upon government control. To the other ill effects of this great experiment, therefore, may be added the dislocation of industry and the losses growing out of the railway strike of 1922. Theoretically this strike is still in force on many railroads, which have been handicapped by sabotage, the restriction of shop output, and similar practices.

As a result of the experience gained, subsequent to the passage of the Interstate Commerce Act and primarily the experience gained during the government control period, during 1918 and 1919, there was enacted the Transportation Act which became effective in March, 1920. As an example of the inefficiency and injustice of government supervision as practiced in the past, it is worth noting that prior to the passage of this Act and during the whole life of the Interstate Commerce Commission, that body has had no guide in establishing rates other than the constant demand on the one hand by the public that rates be lowered, and on the other hand by the railway executives that rates be advanced to a point that would make it possible to secure the capital necessary for betterment and extension. As usual, the popular clamor overweighed the minority demand, with the result that rates were kept so low as to prevent securing capital wherewith to keep abreast of the industrial growth of the nation. It

was only with the passage of this Act, that the principle was recognized that if government assumes the rights to fix rates, it must assume the responsibility for such rates as will return reasonable interest upon the capital actually invested. The government is obligated to protect the public welfare. Railway transportation is vital to that welfare, and it cannot be supplied under a government policy that refuses adequate rates. The alternative is obvious.

There are three extremely important provisions in the Transportation Act,—a new method of rate fixing, the establishment of the Railway Labor Board, and the provision for consolidation of the railways. The fundamental advantage of the Transportation Act over previous legislation is that it strengthens the power of the Interstate Commerce Commission over railway finance and service, and recognizes as well the fact that the authority to regulate must be accompanied by responsibility for the results of that regulation. The Act provides that such rates shall be established as will enable the railways as a whole, or by groups, under honest, efficient, and economical management, to earn as nearly as may be a reasonable rate of return upon the aggregate capital value of their properties, held for and used in the service of transportation. It further directs what percentage of return upon the railway's property value is fair. Due consideration must be given, among other things, to the transportation needs of the country and the necessity of enlarging the existing transportation facilities as occasion requires.

The Act established  $5\frac{1}{2}$  per cent of the value of the railways' aggregate property, as a fair return per annum for the two years beginning March, 1920, to which the Commission in its discretion might add one-half of one per cent. The Commission is further instructed to determine, from time to time, what will constitute a fair return, and accordingly, in 1922, it ruled that  $5\frac{3}{4}$  per cent per annum should be a fair return for the two years subsequent to March 1922. From any excess of 6 per cent return on the fair value of its property, the railways must place one-half in a reserve fund and must pay to the Commission the other half for the purpose of establishing and maintaining a general railway contingent fund, to be used in loans to such railways as need funds for capital use, or to acquire securities. Control over all security issues by the railways is given to the Commission.

Thus the Transportation Act, through its provisions as to rates, excess earnings, and security issues, gives the Interstate Commerce Commission almost complete financial control of the railways. It places in the hands of the Commission absolute control of those factors of interest to the public, and leaves the detailed operation to the railway management. The public has all the government protection necessary, with all the benefits of private operation. Success depends of course upon wise use of the authority conferred upon the Interstate Commerce Commission by Congress.

The Act provides for the establishment of a Railway Labor Board to settle disputes which cannot be settled between the individual railroads and their

employees. The establishment of the Labor Board provides a method by which differences may be adjusted, although the Board has no power to enforce its decisions, and there is no obligation upon the part of either the railroads or the employees to refer their disputes to the Board. The Act further directs the Interstate Commerce Commission to prepare and adopt a plan for the consolidation of the railways of the United States, into a limited number of systems. Whatever may be the criticisms levelled at this Act from various sources, the fact remains that up to date, it is the most constructive piece of railway legislation ever enacted. It is entitled to a full and fair trial. If defects exist they should be corrected, but complete repeal of this act is unthinkable.

Nationalization of railways has been advocated by many on the theory that it would work great public benefit, in that the railways could be operated at less cost, which would be reflected in reduced freight rates. Cursory examination only of the subject is necessary to show the fallacy of the argument. The total operating revenue of Class I railways for the year ending December 31, 1922, was \$5,559,000,000. This includes earnings from operation and net return from outside investments. The total amount consumed in operating expenses was 86.3 per cent, which may be divided into labor, approximately 44 per cent, and other operating expenses, 22 per cent, leaving a net operating income of 13.7 per cent. Of the 13.7 per cent of net income, practically 9 per cent was used for interest, and something less than 5 per cent for dividends on

stock. Taxes consumed more than was paid in dividends. It is obvious from these figures that operating costs so much exceed all other expenditures, that consideration of this particular item is necessary in any discussion of governmental operation. Great stress has been laid upon the saving to be accomplished under government ownership by securing money at lower interest rates. Little consideration is given to the increased expenses that go with government ownership, due to decreased labor efficiency with the enormous increase in number of employees attendant thereon. That this would far more than offset the saving in interest is so obvious as to be inadmissible of serious debate.

The opinion of the railroad executives as to the value of the Transportation Act is by no means unanimous, some contending that the figure set as a fair return under the provision of the Act is confiscatory, in that it is too low. The clause by which one-half of the excess earnings over 6 per cent reverts to the Interstate Commerce Commission has aroused much opposition. It is contended that it has a bad effect, in that roads which are capable of earning more than the fair return are penalized on behalf of those less efficient, and further, that there is no incentive to increase earnings, by greater efficiency, when faced with the knowledge that the increase will be taken away. There may be some merit in this argument, but on the other hand public welfare will be the test by which the final verdict will be rendered, and it would seem as though public welfare required some distribution

of support, as between the strong and the weak railway lines.

It is yet too soon to determine what changes are desirable in the Transportation Act. It is certain that it is a step forward that ought not to be re-traced. It may be wise to amend its provisions, but the broad fundamentals involved are economically sound. Briefly, whatever the legislation, it should provide for adequate rates, making it possible to secure additional capital; limitation of earning power, and a strengthening of weak lines. There is but one way whereby adequate rates for all railways can be obtained, that is, by making them on such a basis that some railways will earn more than a fair return. Physical surroundings and facilities to-day, almost impossible of duplication, make it possible for certain roads to operate at very low ratio of operating expense to gross income. Other roads serving a public need are not so fortunately situated. It is obvious that standard rates must be in effect everywhere, otherwise the business would flow to the roads having the lowest rates. This leaves but one alternative, namely, a form of excess profit taxation to be taken from some roads in behalf of public welfare and given to others.

In 1913, the agitation for lower rates took the form of instructions by Congress to the Interstate Commerce Commission to investigate, ascertain and report the value of all railroad property owned or used by each common carrier. The underlying reason for the passage of this Act was the belief on the part of the public, either prompted or re-echoed by certain legislators, that the railroads were grossly

overcapitalized and that the "water should be squeezed out." There was little consideration given to the drastic railway reorganizations that had already taken place, that had affected more than 70 per cent of the railway mileage of the United States, and which has resulted in greatly reducing the capitalization. The "water had been squeezed out" but it was inconvenient for our politicians to admit it.

In conformity with the instructions of Congress, the Interstate Commerce Commission has gone forward with this evaluation of American railways, at enormous cost to both the government and the railways, and the work is now nearing completion. The findings of fact, already published, show that, generally speaking, the value of railway property is equal to, or even greater, than the total capital in stocks and bonds outstanding. In other words, notwithstanding what may have once been the condition of watered stocks, receiverships and reorganizations, the flowing back of earnings in the form of betterments has resulted in the creation of values more than sufficient to offset the securities outstanding. In fact it has been shown that in many cases our railways to-day are under-capitalized.

There can be no question but that in considerable degree the public mind has been receptive to these facts, and is to-day far less critical of railway management than at any time since the beginning of the Granger movement. Yet in spite of this, our radically inclined legislators, our conscientious objectors, are still unsatisfied. are demanding still further governmental interference, which, if permitted, must result in practical confiscation of property. It



would be an entering wedge cutting at the very roots of national security. No more disreputable tactics have ever been in evidence in the halls of Congress than those which contemplate overturning the findings of the Interstate Commerce Commission and the substitution therefor of mere political evaluations, that would entirely ignore all fact and be governed solely by political exigencies. No greater national disservice is possible than the accomplishment of this program. It is the embodiment of the program of destruction, that if carried to successful conclusion, would not only work infinite harm, alike to railway employees and the public, but would start us well on the way to repetition of the experience of Russia.

Of only secondary importance to our government experiment in transportation, has been our experiment in shipping. Because of blind folly upon the part of our legislators, or perhaps because of the blind folly of the public in refusing to recognize patent facts and demand legislative action, the shipping of the United States passed largely into foreign hands in the years between 1830 and 1910. In the early days of our national life we were distinctly a seafaring people. Our clipper ships, a source of public pride, excelled the world for speed, comfort, and certainty of voyage. Development of our great inland empire, following the advent of the railroad, occupied the energies of our people, largely to the detriment of our shipping interests. The eyes of the people turned from the clipper ships to the locomotive. Millions of our people had no personal touch with the sea; we became indifferent to the

maintenance of sea power and hostile to any proposal necessary to maintain or reconstruct ocean commerce. Fostered with bonuses of one type and another, foreign shipping grew and flourished. Not the least of the reasons for this was the fact that iron and steel had been substituted for wood in shipbuilding. These materials could then be produced cheaper in foreign countries than in the United States. The government did nothing in the way of subsidies to offset this difference, and as a result the leadership in shipping shifted from this country to Europe. The inexorable economic law was again in operation, with the result that with the advent of the World War we had sunk to a position of relative insignificance as a maritime nation. We passed navigation laws permitting only ships carrying the American flag to engage in coastwise trade between American ports; we prohibited foreign-built ships coming under American register; we tinkered by legislative enactment with the economics of ocean transportation and permitted our ocean commerce, other than coastwise, to pass into foreign hands. The public, as usual, uninformed, ignorant of the significance of it all, and therefore apathetic, permitted our legislators to mishandle, bedevil and generally disrupt an industry in which we were once supreme.

The height of our prosperity as a ship-owning nation was in 1830. In that year railway construction was just beginning. The first few miles of track, from Baltimore to Ellicott's Mills, Maryland, were laid in 1829. The railroad era had begun; the shipping era for us commenced to decline contemporane-

ously with railroad construction. In 1830 more than 90 per cent of our commerce was carried in our bottoms, as contrasted with 1913, when we carried but 9.1 per cent of our total foreign trade. We have sat supinely by, permitted without protest the passage of unwise legislation, refused government coöperation and subsidy, either in the form of money or its equivalent, and generally pursued a deadly policy of short-sightedness as related to shipping. Our inspection laws are a still further handicap. Under American regulations, American ships must be inspected annually. This necessitates the ship having empty holds and the boilers must be cold. In other words, the ship must be put practically out of commission, which means delay and disruption of her schedule. The foreign vessel, on the contrary, empties only one hold at a time, puts one boiler out of commission at a time, and meanwhile continues loading and discharging cargo. She is given a certificate for the part of the vessel which has been inspected and goes upon her voyage. Upon her return, another part of the ship is inspected, and in this way the vessel is able to go through annual inspection without disarranging her schedule, or without in any way interfering with working conditions. The officials of foreign governments realize that anything that will help the vessel, is a benefit to the national welfare, and act accordingly. Our regulations, on the contrary, seem to be designed to handicap, cripple, and embarrass to such a degree as makes it difficult for the owners to operate satisfactorily. In contrast with the coöperation of foreign governments, the unnecessary annoyances and

handicaps of our own regulations stand out sharply. The Republican Middle West and the Democratic South have with equal unanimity refused constructive legislation. The effort of the Shipping Board, backed by President Harding, to pass a subsidy bill equally met with failure, and we are confronted with the problem of our ships and what to do with them.

The oratory of the political spellbinder is impotent to stop the operation of economic principles that control our shipping problem, just as they control every other industrial problem. The result is that Congress faces the highly unpleasant task of assuming the responsibility for unwise and faulty congressional action, and attempting some sort of legislation to cure unsatisfactory conditions, for which it alone is accountable.

Because of the World War we have had world supremacy offered us for the taking. We have failed to grasp the opportunities and in no particular more glaringly than as related to our shipping. No nation has ever held first rank among the countries of the world that did not, in large part, control its sea traffic. The period of the Boer War, with the diversion of British shipping to meet that emergency, should have had profound effect upon Congress. As a matter of fact, the lesson passed unheeded. The diversion of these ships to South Africa depressed our commodity prices, particularly of farm products, and demonstrated that the farmer, even more than the manufacturer, should be interested in America's control of her own tonnage. But the farmer and the manufacturer alike failed to realize

the lesson and demand congressional action, and as a result we continued in our thoroughly shortsighted shipping policy.

In 1915, Senator Fletcher, speaking before the Academy of Political Science in New York, said: "Through lack of merchant vessels to carry its cotton abroad, the South suffered a loss of over two hundred million dollars last year. The farmers of the Northwest for the same reason suffered losses of additional millions. Phosphate could not be moved at all; lumber and fuel shipments were seriously limited. Our merchants and manufacturers likewise sustained heavy losses, and thousands were out of employment who otherwise would have been regularly employed if the United States had controlled ample fleets of American ships. On occasion we hear quite a little about our independence and freedom. On land the United States is a full grown man; on the sea a child in a row boat without a life belt."

The outbreak of the World War found us, as usual, nationally unprepared for any emergency. It was but a repetition of our experience at the outbreak of the Spanish-American War, when we were compelled to call upon the merchant ships of other nations, principally of Great Britain, to move our soldiers to Cuba and the Philippines, as well as to provide the transports to furnish them with supplies and military equipment, including coal for our warships. The same situation was in evidence at the outbreak of the Mexican and Civil Wars; cold and dispassionate examination of the latter event proving conclusively that 50,000 thoroughly trained and equipped soldiers would have, within a few months,

annihilated the Southern Confederacy. The opening chapters of the struggle which deal with the conditions in and about Washington, in the first year of the Civil War, tell a pitiful tale of governmental inefficiency and unpreparedness.

As is usual with all government activity, we delayed too long in the recent conflict. When the crisis was upon us we became hysterical and attempted overnight to create, among other things, a mercantile marine. Many of us had lent sympathetic ear to the famous pronunciamiento of William Jennings Bryan that a million farmers would spring to arms overnight. Too many of us fully believed the truth and accuracy of that statement, failing utterly to realize the infinite preparation necessary for modern warfare. Impelling words of the orator may sway the assembled multitude, but they do not produce rapid-fire guns, rifles, cannon, airplanes, medical supplies, or the untold numbers of things used in modern conflict. Perhaps we have learned from the experience of the World War, things which we failed to learn from our experience during the Mexican, Civil or Spanish Wars; but if we have learned the lesson, we have with singular ineptness failed utterly in its application up to the present time.

The history of the Shipping Board, created by governmental action on the 15th day of June, 1917, is the history of human fallibility translated into ill-considered action by men entirely incompetent to deal with the subject. The inevitable result followed. Wrangling over the policy of construction, the first chairman retired under fire. Succeeded by a business man of no shipping experience, the nation

embarked upon a program that has resulted in the government owning more than 2,000 ships, with a steel tonnage aggregating more than 7,000,000 tons. We operated 421 of those vessels, at an estimated loss of \$50,000,000 for the year 1922, and with more than a thousand ships swinging idly at their anchorage.

As a result of our total refusal to prepare years, decades, or generations in advance of coming events, we shall have to write off a shipping loss of probably \$3,000,000,000. Due to governmental meddling, private operations have been disorganized and carried on at startling losses. It has been impossible for private owners successfully to maintain themselves in the face of government competition, that not only has earned no return upon the investment, but has shown an actual yearly operating loss of more than \$50,000,000 in addition.

Operating lines for the purpose of building up trade routes in order that the government might sell its ships has worked defeat of the purpose, in that in upbuilding these routes the government has driven its potential customers largely from the sea. We have failed utterly to take heed of the paternalistic activities of European nations in past centuries. Like them and in the face of their experience, we have made matters worse by trying, through government operation, to carry on trade that private industry would have been glad to undertake with proper governmental sanction and support. With childlike simplicity, we believed that it was entirely possible to build up under government operation a satisfactory mercantile marine. We neglected en-

tirely to consider that the largest fleet of English ships under one control comprised less than 200. We failed to realize that through years of experience, British ship-owners had not only a store of knowledge vastly superior to our own, but had built up throughout the world trade routes, facilities and connections, with which it was not possible for us successfully to compete. We had the simple faith to believe that an American citizen, untrained in the ways of shipping, could successfully supervise and direct the competitive activities of nearly 2,000 ships as contrasted with the largest English fleet of less than 200. We believed that inexperienced as he was, assisted by a staff, many of whom were equally inexperienced, the Chairman of the Shipping Board could direct these ships to the various ports of the world, secure cargoes and operate them profitably in competition with the ships of other nations, privately owned and operated by men who had spent their lives in the business, whose staffs had grown up with the business and whose governments sympathetically coöperated with subsidies of one kind and another. So far as success was concerned, we might as well have sent the next day the famous million men who were to spring to arms overnight, without arms or training, against a million veterans armed with rapid-fire guns, gas bombs and artillery. The slaughter of men in the one case would have been no greater than the slaughter of capital in the other. And yet we cry for government ownership and operation!

The exigencies of war demanded the creation of a mercantile marine with the least delay; expense be-



came secondary; national existence apparently rested upon the prompt creation of this marine and we built regardless of price, design, or operating efficiency. Much that was done during this period seems almost inexcusably wasteful and ill-planned; but "C'est la Guerre" has served to explain or excuse so much that our war-time shipbuilding program may well have the same defense. But how can our conduct after the war be defended? A comparatively small part of our shipbuilding program had then been completed, but instead of canceling all contracts, except such as were so nearly completed as to make completion more economical than cancellation, the Shipping Board went ahead with the building of ships practically as if the war were not over, and Congress continued to appropriate the huge sums necessary to pay the bills. Following the armistice two courses were open to the United States; to complete at a cost of billions, or to cancel as far as possible all outstanding contracts. The former course was adopted in the belief that the world shipping situation presented an opportunity to make the United States the foremost maritime nation. Ocean freights were extremely high, and it was confidently expected that they would so continue long enough to enable us to write off much of the excessive war-time cost of construction. But long before our construction program was completed ocean freights had fallen to such an extent that our government shipping operations have been conducted at a loss of hundreds of millions of dollars. This loss has been enormously increased by the policy which was adopted of practically covering the

earth with Shipping Board lines, utterly regardless of any possibility of profitable operation.

With this idea of world domination of our shipping and of the great profits which could be earned, the Shipping Board refused to sell its ships except at prohibitive prices. Experienced shipping men refused to buy, and such ships as were sold were bought chiefly by inexperienced speculators, on such terms that when the crash in shipping came nearly all the ships sold by the Board had to be taken back at great loss.

To-day practically all the foreign trade of the United States carried in American ships is carried in Shipping Board ships operated at very heavy loss. Meanwhile our ships are rapidly nearing the end of their useful existence, are of a type unsuited to meet the keen competition of world shipping, and will soon be unable to afford even a nucleus of an efficient merchant marine.

That we must have an efficient merchant marine both for purposes of war and peace is admitted and declared by both great political parties, and equally that it should be privately owned and operated. When it comes to adopting a policy to bring about the result desired, and enacting the necessary legislation, Congress does nothing. In the late war our lack of a merchant marine only cost us a few billions; we were fortunate in our associates or allies. In the next war it may cost us our national existence. At the conclusion of the war we had less than 600 ships of all kinds available, but by June 30, 1921, vessels owned by the Shipping Board had reached a total of over two thousand, 1,524 of which were steel, 288

wood and composite, 10 concrete. Our excursion into the field of the mercantile marine has been characterized by one of the chairmen of the Shipping Board as the greatest commercial failure in history. Another chairman, once an ardent advocate of government ownership and operation, now bitterly opposes it. Truly, experience is the best school-master, but the school fees are heavy.

It was well known after the war that the personnel of the Shipping Board was making strenuous efforts to secure employment with privately-owned corporations. The organization was a shell, already bereft of its ablest employees; others were anxious to leave at the first opportunity. It struggled on in vain attempt to make government operation successful at least in part. Confronted with necessity for constructive action, Congress again wobbled, backed and filled, and left us with no satisfactory solution of the problem. It was quite evident that continued government operation meant final elimination of private operation of American shippers, because of the type of competition offered by the government, yet obvious remedies failed of legislative sanction.

The famous around-the-world cruise of our navy, promoted by President Roosevelt, developed the humiliating fact that our warships had to be supplied and bunkered by foreign-owned vessels. During the World War, when our naval vessels were urgently needed upon the fighting front in Europe, we were compelled to keep at home our first-line oil-burning battleships, because there were not sufficient tankers to carry the fuel oil to them. At this very time proposals were being made in Washington

to cut the tanker construction program. In 1914 we possessed but 15 passenger ships available for use for naval auxiliaries, as against more than 200 owned in Great Britain. To-day we have 50 while England has 250.

In tonnage we have to-day a formidable array. Its efficiency is, to say the least, questionable. Built without regard to type or balance, because of war exigencies, we can to-day have no thought of naval or mercantile equality with Great Britain, and until we have a mercantile marine in balance and tonnage suitable to act as auxiliaries to our naval vessels, our naval strength will remain crippled.

## CHAPTER VIII

### THE PROBLEM OF AGRICULTURE

No nation can view with complacency conditions which inevitably forecast exhaustion of the soil, the taking out of more than is put in. Yet this is exactly what happens in the case of most tenant operated farms, and their number is legion. In some counties of the middle western states as much as 70 percent of the land is farmed by tenant farmers, and it is no secret that the farm owners are becoming more and more seriously concerned with the problem of soil depletion. Upon protection of soil fertility depends the stability of the state. Soil exhaustion deals a direct blow at that stability. It follows, therefore, that the citizens of small means who seek to own and farm agricultural land, with due regard to the preservation of its fertility, are worthy of perhaps greater consideration and assistance than are the members of any other industrial class, not on grounds of philanthropy, but purely and simply as a matter of national self-preservation.

Broadly speaking, the need of the farming community is a rational program of long-time credits, based upon sound economic principles, and which recognizes the fact that it is entirely possible under modern methods, with modern equipment, to pro-

duce a quantity of farm products in excess of our ability to consume.

A great deal has been said about the depopulation of the country and the concentration in the cities. The reason is entirely simple. Rural population has migrated to the cities because it could there receive better wages and surround itself with better living conditions. This migration will cease just as soon as rural life becomes as attractive as, or more attractive, than urban life.

It is impossible to formulate any general proposal relating to agriculture that will be applicable over the entire United States. What is practicable in one locality may be impracticable in another. For instance, a program that will apply to the irrigable and intensively cultivated areas of the Sacramento and San Joaquin Valleys in California, will not apply in the arid grazing areas of the same state, any more than it will to the cow or sheep country of Nevada, Utah or Wyoming.

The problem may therefore be divided into two parts, namely:

1. Credits for tenant farmers or others desiring to own farms already improved.
2. Financing would-be settlers upon unimproved lands, particularly the irrigable land of the West.

Farming has become a capitalistic enterprise. Our vast areas of free land have gone, never to return. He who would own a farm must buy it, or if he takes land under some government irrigation project, he is faced with an annual charge to repay the government for its expenditures in making the water avail-

able. In addition to this payment, he must find sufficient money properly to equip his farm. In total, this requires considerable capital,—more than the average farmer can command. The result under existing conditions, due to insufficient capital and inadequate financial machinery, is the tenant farmer and the almost universal financial failure of our irrigation enterprises.

We have heard a great deal about the need of government aid in creating irrigation districts and making more land available for settlement. But there has been little said about the ability of the country at large to consume the products so furnished. As a matter of fact, there are enough farms already under cultivation to supply our needs for agricultural products. The use of undeveloped areas may well be subordinated to a greater need of making available agricultural credits for tenant farmers or others desiring to purchase fully developed farms.

Adequate machinery whereby such transactions can be financed does not exist. It is true that the Federal Farm Loan Banks and the Joint Stock Land Banks have very greatly improved the situation. But these institutions are restricted to a comparatively narrow field when compared with the activities of foreign land banks, or the experiment of state land settlement being tried in California.

During the past two or three decades, rural life has been passing through a period of intense evolution, just as has urban life. The farmer is no longer content to live in isolation. The telephone, the radio, and most of all the automobile, have worked profound change in his outlook upon life. He is a

gregarious individual, and in the satisfaction of this trait of character he demands good roads over which he may quickly reach his community centre or his neighbor's door. The American standard of living, that is so markedly in contrast with European standards, has left its impress upon him. His wants, and the wants of his family, are similar to those of the city dweller. Substantial houses, good barns, adequate farm machinery, a well-kept farmstead that yields reasonable return for effort expended, is the great backlog of national security. Shacks, dilapidated equipment, inadequate housing, are features of American rural life that must be eliminated. Certain urban facilities, comforts and luxuries must be provided if there is to be anything more than mere oratory in the "back to the farm" slogan.

Some years ago the government of the United States entered upon a program of irrigation development for the arid lands of the West. Private enterprise, actuated by a desire for profit, also undertook the joining of land and water and selling the land to prospective settlers. The government program contemplated the return to the government of the invested capital only, by means of installments extending over a long period of years without interest, and permitted the settlers to homestead the government land. With the single exception of the Orland project in California, where the land was already in private ownership, these government irrigation projects have proved financial failures. Farmers have not had sufficient capital to equip their farms with the necessary buildings and livestock, and meet payments due the government. The result has been



that the first and second tenants have almost uniformly failed; the third, benefitting by the failure of the two preceding, has been enabled to pull through.

Disaster has been almost universal in the case of private irrigation enterprises, where land has been purchased, doubled or trebled in price, and selling commissions of 25 per cent and as much as 35 per cent paid. The farmer buying a subdivision was expected to pay one-quarter down and the balance within 5 to 10 years, with interest on deferred payments at 7 and 8 per cent, and in addition supply sufficient money to equip the farm. The absurdity of expecting the farmer to carry such a financial load is now obvious to even the most obtuse.

These are the two types of land settlement which have been most widely practiced in the United States. Neither supplied what was necessary. As the outgrowth of this experience, it has become generally conceded that land settlement in the future must comprehend organization of a financial system whereby a complete farm unit will be created and turned over to the farmer on small payments. The balance of the purchase price would be paid over a long period of years and at a low rate of interest.

It is desirable also that some system be devised that will make it possible for the farmer to buy an already developed farm unit upon more liberal terms than those accorded by any of the financial institutions now functioning. The Federal Farm Loan Bank has filled a very necessary want; the Joint Stock Land Banks equally are rendering an important service. But beyond this, it seems desirable

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to create some machinery that will extend still further credits and furnish supervision and expert advice.

Land settlement in Europe and Australia is a well-established and understood activity dealing directly with the welfare of the state, and as such is encouraged and assisted. Even in the less densely populated countries of Brazil, Venezuela, Uruguay and South Africa, state aid has been introduced to encourage immigration, just as it has been introduced in Europe to discourage emigration. Denmark, Norway, Sweden, Great Britain, Germany, Russia, Austria, the six Australian states and New Zealand, all have passed legislation dealing with the subject. The underlying motive has in all cases been the same: that is, to provide homes for settlers at the least possible cost, and defer payments over a long period of years, with financial aid upon a more generous scale than is ordinarily accorded to industrial enterprise.

A report of the German government summarized the situation in these words:

"Colonization has been made a public matter because when it was a private matter persons bought land without having funds to pay for it, only to make a profit by selling it again at the first opportunity. Unprincipled middlemen persuaded owners to part with their lands, and other professional subdividers of land sometimes unscrupulously dismembered holdings with an utter disregard for economics; and the consequence has been a continual increase in the price of land."

The Danish government for many years has had a policy of buying land, subdividing and selling it

to those citizens who could furnish satisfactory proof of their ability as farmers and who could pay only one-tenth of the cost of the land and the improvements. The time of payment was from 50 to 75 years; the interest rate was placed at from 3 to 4 per cent. Private subdivisions have also been carried on under public supervision by associations formed for the purpose, the government guaranteeing loans made by land banks to assist the buyers in completing their purchases. Germany, in its East Prussia and Polish activities, under the Home Colonization Commission, provided more than \$200,000,000 for farm purchase, while colonization under a combination of local and state authorities has been active in all parts of Germany. It was predicted prior to the war, and because of these activities upon the part of the state and local authorities, Germany would eventually eliminate the tenant farmer. Regardless of the political significance of the East Prussia and Polish activities, there can be no doubt that the work performed has been of the highest benefit to the nation. Expert supervision was provided; interest charges were  $3\frac{1}{2}$  per cent, no payment on account of principal was required until the expiration of 50 years. The plan really provided a 50-year lease with the privilege of purchase thereafter, with certain very definite and rigid requirements as to cultivation, maintenance and improvement. In Russia between 1906 and 1910, the Peasant's Land Bank bought, subdivided and sold to settlers over 4,000,000 acres of land, loaning as much as 90 per cent of the value, at 4 per cent interest and with the payment period

varying from 13 to 55 years. Prior to the revolution, Russia was said to be planning the most liberal and comprehensive system of state aided land settlement yet undertaken by any country.

It is in Australia, however, that the system of land settlement offers us most interesting opportunities for study. Endowed with climatic conditions closely resembling those of California, the products are in large measure identical. As in America, in the early days, land seemed without limit. Great tracts were practically given away and were concentrated in a few hands, with the result that either intensive farming was blocked or a type of tenant agriculture developed which was highly undesirable from the standpoint of the state. This evil induced its own cure and may be summarized as follows:

It was agreed that the best interests of all could best be served by

- (1) Having farm units large enough to provide a living income for the farmer and his family;

- (2) Estimating the capital investment necessary to improve and equip the farm, and determining the amount the settler was to furnish and the amount to be borrowed from the state;

- (3) Providing expert supervision, both as to equipment and operation, to the end that the failures should be reduced to the minimum and production made possible in the shortest possible time;

- (4) The maximum value of any one allotment to be \$12,000 plus \$7,200 for improvements, or a total of \$19,200;

- (5) Allowing the settler to pay 3 per cent of the

value of the property as an initial payment; pay an interest rate of  $4\frac{1}{2}$  to 5 per cent and have 31 to 36 years in which to complete payments.

(6) It is a condition of the lease that improvements to the extent of 6 per cent of the capital value shall be made by the end of the sixth year.

(7) In addition to these farm units there are what is known as "Agricultural Laborers' Allotments," sold under a purchase lease running for  $31\frac{1}{2}$  years. The purchaser pays 3 per cent of the capital value plus \$6 lease and registration fees, and may acquire a tract of a total value not exceeding \$1,680. Residence on the Allotment for 8 months of the year is compulsory.

(8) In addition, a dwelling of a value not less than \$144 must be erected by the end of the first year, and the allotment fenced by the end of the second year.

(9) Settlers unable to meet deferred payments promptly may obtain temporary suspension thereof up to 60 per cent of the value of the improvements effected by them; or an advance up to the same amount may be secured by them for further improvements provided installments due to date have been paid. Interest on all such advances is at the rate of 5 per cent per annum. For the first 6 years the maximum advance cannot exceed \$2,400; thereafter, the advance may be as much as \$4,000.

In the period 1911-1914, the six Australian states purchased and subdivided over 3,000,000 acres. During the period 1909-1914, \$68,000,000 was loaned to farmers to be used in making improvements and

buying equipment. All of this has been done without cost to the general taxpayer, as the interest paid by the farmers has not only met the interest paid by the state but has created a surplus of \$1,233,000 as well.

This is a brief review of land settlement legislation throughout the world which has been forced by economic pressure, although in part from exactly opposite causes. In all cases it was proposed to meet the same fundamental need of financial aid for farmers. In some countries it was fostered to encourage immigration, in others to prevent emigration, but in all as a preventive of unrest and radicalism.

Legislation to bridge the gap in the United States has been passed in but one state, California. And it is that legislation, therefore, which it is desirable to discuss. The inspiration for this law came directly from Dr. Elwood Mead, author of several books, and perhaps the best known authority in the United States, upon the subject of irrigation. Dr. Mead has had wide practical experience both in the United States and in Australia, where he was for 8 years in charge of irrigation development for the Australian government. Returning to the United States to accept the Chair of Rural Institutions in the University of California, Dr. Mead immediately took up the work of securing in California some legislation comparable with that in Australia or in Europe. A commission was appointed by the Governor of the state in 1916 to "investigate and consider the questions of land colonization and the various forms of land banks, coöperative credit unions and

other rural credit systems adopted or proposed in this country or elsewhere, with special view to the needs of the rural communities of the state." Dr. Mead was named as Chairman; the other members being David P. Barrows, later President of the University of California, Harris Weinstock, a merchant of Sacramento, Mortimer Fleishhacker, a San Francisco banker, and Chester Rowell, then proprietor and editor of *The Fresno Republican*. The report of this committee, a pamphlet of 120 pages, reviews the subject of land settlement here and abroad, and recommends a demonstration of the plan proposed.

As a sequel to this investigation, the State in 1917 passed the Land Act, making available \$260,000 for the purpose. The object of the Act is "to provide employment and rural homes for soldiers, sailors, marines and others, . . . to promote closer agricultural settlement, . . . to assist deserving and qualified persons to acquire small improved farms, . . . to demonstrate the value of adequate capital and organized direction in subdividing and preparing agricultural land for settlement, and to provide homes for farm laborers."

To carry out the program, a Board of five members was created, to be appointed by the Governor. "The Board is granted the power of eminent domain, and may acquire by purchase or gift, lands, water rights, and other property needed for the purpose of land development and settlement. The Board shall without delay improve, subdivide and sell to *bona fide* settlers such lands as it may acquire.

"All land sales must be made under such terms and on such conditions as shall give the Board full

control until all moneys advanced by the state are fully repaid. The lands are to be divided into farms and farm laborers' allotments. Farms shall not have a value in excess of \$15,000 without improvements; farm laborers' allotments a value not to exceed \$1,000 without improvements.

"Settlers must within 6 months enter upon the land and may own only one farm or farm laborer's allotment.

"Every purchaser shall enter into a contract to pay 5 per cent of the sale price and 10 per cent of the cost of improvements. At the option of the Board, the purchaser shall apply to the Federal Farm Loan Bank and shall pay the amount of said loan to the Board. The balance due on the land shall be paid in amortization payments extending over a period to be fixed by the Board but not to exceed 40 years. Interest on deferred payments to be at the rate of 5 per cent per annum. The amount due on improvements shall be paid in amortization payments to be fixed by the Board, but within 20 years, with interest at 5 per cent.

"The Board may prepare all or any part of such land for irrigation and cultivation; it may seed, plant, fence; cause dwelling houses and other buildings to be erected, and render the allotment productive in advance of, or after, settlement; the total cost of such dwellings, outbuildings and other improvements not to exceed \$1,500 on any one farm.

"The Board may cause cottages to be erected on farm laborers' allotments and provide a domestic water supply; all not to exceed a total cost of \$800.

"The Board may make loans to approved settlers



on the security of permanent improvements, stock and farm implements; the total amount of loan, together with money spent as above indicated, not to exceed \$3,000 on any one farm or \$2,000 on any one farm laborer's allotment.

"Authority is granted to operate and maintain irrigation works, where deemed desirable.

"Every contract shall provide that the purchaser shall cultivate the land in a manner satisfactory to the Board and shall keep all improvements in good order. All buildings shall be kept insured by a policy made in favor of the Board.

"No allotment may be sold, transferred, assigned, mortgaged or sublet without the consent of the Board until the allotment is fully paid for and all terms of the contract complied with.

"In event of failure of settler to comply with the terms of the contract, the Board may at its option cancel said contract, and the settler shall forfeit all right thereto, and all payments theretofore made shall be deemed to be rental paid for occupancy.

"Residence on the allotment must commence within 6 months and must continue for at least 8 months in each year for 10 years."

The act provided an appropriation of \$260,000. The appropriation was so small that had it not been for the reputation of the members of the Board it would have been impossible to have financed the first settlement. As it was, the Board finally secured a tract approximating 6,000 acres near Durham, California, by the payment of 10 per cent down, the balance to be paid in amortizing payments over 20 years. Interest is calculated at 5 per cent.

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A part of the \$260,000 was used in the form of loans to settlers, and after great effort the colony was so successfully launched that the next legislature appropriated an additional \$1,000,000 to be repaid in 50 years, with 4 per cent interest. With this sum the Board bought approximately 8,700 acres near Delhi, in the San Joaquin Valley, paying one-third cash, the balance in amortizing payments over 10 years. To complete the improvements, the last session of the legislature appropriated an additional \$1,000,000.

The State of California, therefore, has at the present time two successful developments to show for its land settlement activities; one at Durham, where some 120 families are farming about 5,000 acres, and the other at Delhi, not yet entirely completed, but where there are now some 4,000 acres under cultivation by 150 families and where there will be, when completed, a total of 8,000 acres and 400 families.

Regarding the Durham settlement, the statistical expert of a large life insurance company said recently: "The preliminary arrangements to insure the health of the settlers are the most enlightened and efficient I have ever seen."

Experts of the Department of Agriculture at the University of California were called in to make soil maps; the professors of Husbandry and Agronomy helped work out the kind of agriculture best suited to the locality. The prices of land were largely determined by a careful soil survey made by the Department of Soil Technology of the University of California. Draughtsmen from the State En-

gineer's Office helped the farmstead engineer, employed by the Board, to prepare plans and estimates for houses and other farm buildings during the rush of early development. Later on, the United States Department of Agriculture detailed one of its experts to aid the settlers at Delhi in the purchase and selection of their dairy herds. In short, the best talent of the State and Federal governments co-operated in assuring the farmer that there would be no mistake.

On those two projects the settler has found available practically a ready-made farm, prepared by the best talent from the University of California and the United States Department of Agriculture. Selling commissions and accumulated interest charges due to a long deferment of sales have been eliminated; interest held at a minimum; expert supervision provided, and only those settlers accepted whose record for industry, frugality and ability is satisfactory.

It seems plain, as the result of a study of the various land settlement activities throughout the world, that the period of experimentation has long since passed and that there are now certain well recognized fundamentals which, properly coördinated, must bring success. These may be briefly summarized as follows:

- (1) Land at a price justified by its earning power;
- (2) Intelligent supervision of the settler during the development period;
- (3) Long-time payments;
- (4) Small initial payment;
- (5) Low rates of interest;
- (6) Turning over to the settler a farm practically

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completed as to development and only needing, to produce an income, the planting of the crops and their care during the first year; or the loaning of money for this purpose;

- (7) Elimination of excessive interest charges due formerly to long deferred land sales.

What has been worked out as to unimproved land in California can certainly be worked out there and elsewhere as to farms already improved, the purchase of which is desired by some farmer, tenant or otherwise. Associations of a number of individuals in a given district jointly guaranteeing each other, a small reserve fund to meet temporary delinquency in payment of interest or principal, the joining together of these associations into larger groups, careful selection of farms, soil, price and equipment all considered, the same careful selection of purchasers, proper supervision of the whole, and there seems no reason to doubt but that success will finally crown the effort. Building up a reserve fund of considerable dimensions will eventually provide ample margin of safety. In fact, the states could well afford setting aside the money necessary to create such a fund. It would the sooner make the effort successful. Like all other efforts, industrial or agricultural, the work should be undertaken by private capital; that it has not been is but poor tribute to the wisdom of our industrial leaders. If private effort will not, then government must, for the objective is far too important to permit of failure in providing the necessary machinery.

The weak spot in any state activity is the liability of the work coming under political control or in-

fluence, with all the attendant evils that politics connote. The California Land Settlement Act went on the rocks due to political interference. It may be salvaged, but there is no guarantee that at some later date it will not again be torpedoed. Unskillfully handled, it would be possible to pile up an obligation of millions of dollars that the state would be forced to pay. Equally, if corrupt politics entered into the situation, the opportunity for graft and loot would be enormous.

It is worth noting that in the Delhi colony a spirit of repudiation is active, and that strenuous efforts are being made to have the state remit a large part of the payments due. Just how the situation will finally work out will have considerable bearing upon future state operations. If the precedent set by the Municipal Street Railway in San Francisco is followed, political consideration will be paramount. In the case of the Delhi colony, similar results may come to pass for similar reasons. If so, land settlement under state supervision may come to an ignominious end. Broadly speaking, if the political element cannot be eliminated no kind of government effort in business can succeed and, to date, there is little to indicate that such elimination is possible.

We have had too much government in business in the last few years, and the result has been a striking vindication of individual effort, initiative and efficiency. Government should, so far as is humanly possible, stand aloof from all private business activities. But there are many problems that must be solved in the future either by government or by

broad-minded coöperative effort on the part of our leading business men. Whether they will turn aside from purely personal effort for maximum gain, and devote a portion of their time to problems such as that of land settlement, remains for the future to disclose; their actions in these respects, whatever they may be, will largely determine the policy that the government must adopt, for it is obvious that these vital and pressing problems cannot be permitted to go unsolved.

Whether solution by government will be successful, or not, time only can answer. The effort will undoubtedly be made in cases where private initiative fails to perform the task. Whether the state effort will be a satisfactory substitute, or not, is the debatable question. To date the answer seems to be that it will not, and that it can never be, except through the elimination of all political consideration. A condition devoutly to be wished for, but so distant and so highly improbable of attainment that it seems hopeless of realization.

## CHAPTER IX

# THE RELATION OF CAPITAL, LABOR AND GOVERNMENT

FROM earliest times there has been a constant struggle by humanity to attain for itself a more satisfactory position in life. Until recently among civilized nations human beings were treated as slaves or mere chattels without rights, subject to being bought, sold, beaten or even killed at the will of their masters. By degrees slavery has disappeared among the more enlightened nations; it is still in evidence among uncivilized tribes. Civilized nations have come to recognize the right of all mankind, to life, liberty and the pursuit of happiness.

In order to maintain this right, it has been necessary for peoples to band themselves together in associations. Attainment of their objects was impossible save through united action. In recent times this necessity for united action has led to the formation of labor unions. Organized in self-defense, these unions were the only means whereby the workmen could obtain relief from obvious injustice. Many of them at times have been controlled by irresponsible agitators using them for selfish ends. Corruption, graft and crime have been in evidence as they have been in other forms of industrial and social life. As a protest against much

that is bad in the union movement, as distinguished from much that is good, there has grown up a comparatively new type of relationship. Founded on the theory of joint representation, shop committees, and the like, it makes no distinction between union and non-union men and attempts to settle within the organization all questions that may arise. What the future holds for such a movement depends almost entirely upon the wisdom with which it is administered. If it remains honest, if it safeguards the rights of the employee equally with the employer, if it is broad-visioned and awake to the aspirations of mankind it will succeed. If, on the other hand, it is used as a vehicle with which to coerce labor, to impose unjust or unfair demands, to undo or attempt to undo the progress that has been achieved, then it will fail.

Should it succeed there is no reason why it should not be a great constructive force working in harmony with labor unions, combatting unfit labor leaders, seeking personal aggrandizement, and being of tremendous benefit to the rank and file of labor in promoting industrial peace, without which neither labor nor capital can attain maximum prosperity.

To one who knows the oppression to which labor has been subjected in the past, the wonder is that in attaining its freedom labor has not been more extravagant in its demands. The ultimate of such extravagant demands is seen in Russia to-day, where the masses of the people are subjected to oppression far more terrible than under the Czaristic regime. It is the elimination on the one hand of capitalistic tyranny and upon the other of labor



union tyranny that is the objective most devoutly to be wished for.

Labor unions have undoubtedly improved the condition of the mass of the people. Because some leaders have been criminals, because murder and arson have been committed at their instigation, there is no justification for condemning the labor union movement, any more than there is justification for condemning the entire human race because some people are degenerates, crooks or murderers. There is, however, ample justification for condemning individuals guilty of such acts and the labor union movement must, in justice to itself, purge itself of such leadership.

The right of workmen to organize cannot in reason be denied. Any attempt on the part of capital to prevent such organization is not only shortsighted, is not only doomed to failure, but stirs up and intensifies a bitterness between employer and employee which should never exist.

It is needful, however, to ask ourselves what are the limitations within which labor-union activities are justified. Certainly there can be no justification for the use of violence, syndicalism or sabotage, and the unions must recognize that the authority of government is paramount. The right to strike is inalienable, but the strikers may not go to the extent of intimidating others who desire to work. Officials of the government authorized to maintain law and order are of course without the vestige of right to strike. Such action would be a direct challenge to the sovereign authority of the state, and as such must be treated as an act of treason. The

Boston police strike is a shocking example of such lawlessness. There was no course for the state to pursue other than to suppress that lawlessness at all hazards and by the use of all available means.

With the growth of labor unions and the power resting in the hands of labor leaders, we face the menace of unwise, unjust and corrupt use of that power for selfish purposes. New York, Chicago, Los Angeles, San Francisco and innumerable other cities have records in the pages of their labor history which show the selfish exercise of power when placed in the hands of individuals, whether capitalist or labor official. Labor unions and capitalistic aggregations have both at times acted as though they were paramount to government. Both have been in large measure undeceived. If there remain any, either in the ranks of labor, or capital, who conceive their cause to be entitled to special privileges, who would override the law and as a minority dictate to both the government and the people, they should equally be driven out of industry.

It is idle to say that capital alone is without blame. The very existence of labor unions is an indication of their need. Collective bargaining is as necessary to modern civilization as is collective capital. Both are the outgrowth of industrial progress and both are under and not superior to the ordained law of the land. Amenable to law, both should be made equally answerable for violation of the law. Unions have risen and flourished because they supplied a need; furnished a means whereby the individual might combine with his fellow men to resist the unfair attacks of capital

and to make articulate the aspirations of humanity that ever seeks to better its condition.

The political labor agitator, gifted with more or less ability to lead, has too often preyed upon the weakness of his fellow men and upon society at large. Glittering generalities, vituperative attack, distortion of the truth, class prejudice,—the seeds of distrust, discontent and hate, have been the stock in trade of such agitators. Leadership has often been acquired purely for purposes of selfish gain. Unfortunately the rank and file have frequently followed such leadership blindly.

Organized to correct obvious evils, to ameliorate the condition of humanity, the labor unions have grown with the industrial growth of the nation. Centralized in their control, they exercise jurisdiction throughout the entire length and breadth of the land. There are in the labor movement many wise and able men who fully realize the necessity for honesty and integrity of purpose. Fundamentally the great majority of the rank and file are prudent, reliable and honest. It is their duty to drive out of the labor movement those who have used it for personal gain, who have not hesitated to jeopardize its success in seeking their own aggrandizement, who would witness its wreck with unconcern if they might benefit therefrom.

Intelligent representation of capital, in turn, has learned that old methods are inadequate; that new ones must be adopted. Harmonious coöperation between capital and labor, upon which rests industrial prosperity, is to be attained only through the principle of the "square deal" in full measure. In

this respect, capital has made greater advances, has become more enlightened, in the past two decades, than has labor. Capital, in large part, has come to realize that a satisfactory relationship can be attained only through mutual confidence, fair dealing and justice. Labor, in part, still maintains an attitude of suspicion, is often ready to apply force at slight provocation, and is unconvinced as to the sincerity of capital.

Most employers to-day recognize the fact that reasonable hours, mutually satisfactory working conditions, shop representation and various other measures now in vogue, are the foundations upon which harmonious relations must be built. Briefly stated, the most enlightened thinkers among the employers realize that they can successfully treat with their men only by voluntarily making conditions as satisfactory as would be the case if the force through labor organizations were applied. Good will and coöperation with respect to safety devices has led to good will and coöperation in the more delicate problems of shop-management. The policy of good will has progressed because both parties have come to realize that it pays the largest wages and the greatest dividends. There is yet an enormous amount of work to be done along these lines. Some states are far more progressive in safety device legislation than others. There should be no slackening of the effort to make the laws of all states equally satisfactory in respect to the protection of life from industrial accidents.

Curiously enough, long before eastern employers were confronted with the problems that caused the

adoption of plans such as those of the Pennsylvania Railroad System, the Standard Oil Company of New Jersey, the United States Steel Corporation, the Leitch Plan and others, the mine employers of the west had started a similar movement. This movement played an important part in initiating in the east the present-day plans of harmonious relationship between employer and employee.

Starting with the organization of the Wardner Industrial Union of the Coeur d'Alene Mining District, Idaho, such relationship has spread over a large part of the United States. Its inception in Idaho was a matter of great urgency. The Western Federation of Miners, with its well-known radical leaders, had created a reign of terror, which in 1898-9 culminated in murder and arson. Mills were dynamited and burned, resisting employers and employees were killed or driven out of the country, and there prevailed a state of anarchy which ceased only with the coming of Federal troops to occupy and police the district. Every theory of representative and free government was violated. Local officials were elected solely because of their union affiliations. They ignored the law, tolerated violence, dishonored their oath of office. The very fabric of republican institutions was challenged. The result was inevitable. This rebellion was met with the call for United States troops. Law and order was restored; but the situation demanded the establishment of harmonious relations between the employers and the employees. Such was the condition when Senator Borah and former Governor Hawley, attorneys for the state in the prosecution of those responsible for the riots,

determined that the workmen should have an organization for their self-expression, mutual aid and protection. The local union of the Western Federation of Miners was disrupted. Its leaders and most active members were either fugitives from justice or in prison, and it was obvious that some other organization through which the men might be represented must be substituted. This took the form of the Wardner Industrial Union. Employers and employees of the various mining companies are members. Sessions are held and both employers and employees take part in the discussions. All subjects having to do with the operation of the mines are carefully considered. In short, a relationship involving mutual responsibility has been established that brings the employee and employer into close and harmonious contact. The organization is distinctly a step forward. Local affairs are settled locally rather than being referred to some central authority hundreds or thousands of miles away, there to be adjusted, perhaps, to suit the whim or convenience of some official, possibly a stranger to the locality and its needs. That the experiment has been successful is shown by the fact that since the organization of the union there has never been a strike in the district, once the prey of unremitting agitation and strife.

It is interesting to note that in 1919 a local of the Industrial Union of Mine, Mill and Smelter Workers was established in the Wardner district, and at one time had a membership nearly as large as the Wardner Industrial Union. Its president was the same man who was president of the Western

Federation of Miners during the lawless outbreak of 1898-9. This Mine, Mill and Smelter Workers' Union was a direct challenge to the harmonious and mutually satisfactory relationship existing between the mine managers and the employees. Bitterly hostile to the Wardner Industrial Union, it existed in the camp for about a year, finally dying out, while the Wardner Industrial Union prospered and grew. There can be no question but what the Wardner Industrial Union has largely contributed to the conditions of industrial peace so sharply in contrast with the industrial unrest existing during the régime of the Western Federation of Miners.

From the Coeur d'Alene this type of organization has spread to other mining sections of the West. The most notable example, perhaps, is the Colorado Fuel and Iron Company. As in the case of the Coeur d'Alene mines, the introduction of the plan by the Colorado Fuel and Iron Company was the result of a strike. For some time prior to its adoption and following the strike of 1913-14, the feeling had been growing stronger and stronger that it was desirable to have some means by which management and workers could be brought together regularly and in a natural way, or could be called together at any time when occasion required, for the purpose of discussing matters of mutual interest, or of special interest to the workers. There was no standard form of contractual relationship. The workers had previously been dealing almost exclusively with those immediately in charge of the plant where they were employed. The result was that practices varied greatly in the different localities where the mines of

the Colorado Fuel and Iron Company were located. Uniform treatment of workmen and uniform interpretation of the company's policies was so obviously desirable as to be unquestioned. It was recognized that old conditions culminating in the strike of 1913-14 could no longer be tolerated, and in the latter part of 1914 the first steps toward organization were taken. In 1915 request was made of the employees of each mine that they select by secret ballot two from among their number to confer with special representatives of the company. The representatives of the employees and the operating officials of the company met soon thereafter in an effort to devise a coöperative arrangement which would insure justice to both parties. The step was significant in that it made it possible for the men to come in direct contact with the chief operating officials of the corporation. Much distrust, injustice and friction is unquestionably the outgrowth of petty practices, indulged in by minor officials of large corporations entirely without the knowledge and directly against the wishes of the chief executives. This step, therefore, upon the part of the Colorado Fuel and Iron Company, was fundamental in bringing about a more harmonious relationship. Coupling the right of representation with assurance that the men might state their grievances without any fear of discrimination, was a still further step towards harmony of relationship. The plan was a recognition of the fact that the old intimate relationship of the small factory, where the working owner knew every man by name and shared his joys and sorrows, was the best system, and the reëstablishment of such re-



lationship, as near as may be, was the object to be attained.

In general, the plan finally adopted provides for:

1. The election by the employees of representatives by divisions, one representative to every 150 men.
2. Formation of committees composed equally of employees and company officials.
3. The holding of district and general conferences and meetings of committees.
4. An administrator known as the Industrial Relations Executive.
5. A mediator or special representative known as the President's Representative.

There are four regular committees, having to do with coöperation, conciliation and wages; sanitation, health and housing; recreation and education; safety and accidents.

The plan has greatly promoted a feeling of mutual confidence in every department of the company's activities. Skepticism of course remains, but the testimony is exceedingly favorable. There has been an almost complete elimination of arbitrary and unfair practices upon the part of mine foremen and others having direction of the working forces. Workmen generally show a much friendlier spirit toward the managing officers. Efficiency has been increased and there is a noticeable decrease of all forms of "soldiering on the job." The establishment of a strong community spirit at the various operating properties is one of the noteworthy accomplishments of this plan. Improvement in sanitary practices and care of homes is in evidence and competition has grown up between the mining camps in respect to beautification of their premises and supremacy in

sport. Broadly speaking, the plan has been a success. Made up, as the company's forces are, of foreigners from many different countries, the prejudices to be overcome and the racial feelings to be harmonized have been considerable. In great degree these difficulties have been successfully dealt with. The feeling that there was some sinister motive behind the proposal has disappeared.

There has been no attempt upon the part of the company to interfere with the efforts of the United Mine Workers looking towards the enrollment of the men in that organization. The success of such efforts, measured by the number of members secured, has varied greatly in different districts, but is apparently a diminishing factor. It is now of less importance than at any time in the last 10-year period. Strikes have been called, more or less effectively disrupting operations; none have been won.

In the local communities and throughout the state in general there is a favorable disposition manifest towards the plan and a belief that it has accomplished much good. On the whole, it is proof that employee representation, even among foreigners of different racial characteristics, can be made successful. Such success in future depends of course upon rigid adherence to one principle, adequately expressed by the single word *JUSTICE*.

Owing to lack of space, these two examples must suffice as representative of such plans in the west. Turning to the east, there are many examples of the modern type of industrial relationship. Altogether more than 300 companies are catalogued as using some such plan. There is reason to believe that this

does not fully represent the complete list. Among the companies having such form of industrial relationship might be mentioned the Standard Oil Company of New Jersey, the Standard Oil Company of Indiana, the Humble Oil and Refining Company of Texas, the Tide Water Oil Company, the Bethlehem Steel Corporation, the International Harvester Company, the Westinghouse Electric and Manufacturing Company, Swift and Company of Chicago, the Commonwealth Edison Company of Chicago, the Philadelphia Rapid Transit Company, the Pennsylvania Railroad Company and the Baltimore and Ohio Railroad. These are picked from the above-mentioned list and are specifically mentioned because of their industrial magnitude.

A review of the plans of the Standard Oil Company of New Jersey, the Pennsylvania Railroad and the Baltimore and Ohio Railroad will serve to give some indication of the progress that has been made among large eastern corporations in attempting to promote harmonious relations between employer and employee.

In the case of the Standard Oil Company of New Jersey, the plan was introduced in 1918. It was prompted by a feeling that it was necessary to restore, if possible, the old coöperative and friendly relationship which still exists in small plants where the owners or operating officials know the men individually by name, and in many cases are part of the working force.

The plan as adopted by the employees has now been in operation nearly six years. Founded, as it was, upon the theory of mutual representation in

discussing operating conditions, it carries out the general underlying theory of practically all such "shop-representation" plans. After this 6-year trial, the plan is functioning to the general satisfaction of both parties in interest. During 1923 there was unusual activity due to a series of conferences for the purpose of discussing a wage-leveling system developed by a special committee on job analysis. It is noteworthy that a mutually satisfactory program was adopted and put into successful operation with the support of the elected representatives of the employees, who had suggested various amendments during the course of the discussion. It has been found that the elected representatives of the men very accurately reflect the general sentiment. They are, as a rule, outstanding personalities and generally speaking are above the average in intelligence. They feel their responsibility and stand for conservatism and moderation. Radical tendencies are notably absent, the trouble-makers being decidedly in the minority.

An element of education enters into this question quite as much as into many others which call for harmony of relationship. Each year about one-half of the representatives are replaced. Obviously, the outgoing representatives go back into the ranks with a better knowledge and understanding of the problems of the company than before their term of service. They become, therefore, an element of stability and generally speaking are of material help to the incumbent representatives. This educational feature applies also, of course, to the rank and file, who with each succeeding year become better and

better acquainted with the merits of the program. There seems to be no doubt, after the years of trial, that practically all of the workmen are in favor of the representation plan. It supplies the means of bringing their grievances promptly before the management and removes the possibility of petty tyranny by foremen, because of the right of workmen to appeal to the conference. This in itself causes the foremen to be far more considerate than formerly, and removes one of the main sources of industrial unrest. Under the rules for employment and discharge, which have been adopted in joint conference, the men feel that they are better protected than they would be if their cases were not subject to joint consideration. Inasmuch as it unquestionably makes for industrial peace, it has the support of the surrounding community, which dreads, above everything, strikes with their attendant troubles.

The plan of the Pennsylvania Railroad System is of particular interest because of the prominence of that company. The Pennsylvania, long regarded as the premier railway system in the United States, is of particular interest in this connection. Its securities in round numbers represent \$2,000,000,000. It has paid an average of 6 per cent on its stock over a period of nearly 75 years. It serves the greatest industrial district in the United States. Its lines penetrate the greatest centers of population. It has always had a reputation for conservatism and good management. Frenzied finance, that has characterized many American railroads, has been unknown to the Pennsylvania Sys-

tem. It may well be accepted as a type of the best in American railroad operation. Its securities, owned by life insurance companies, savings banks and other financial institutions, represent the savings of millions of American citizens of small means.

As a result of the war-time experience, the management of the Pennsylvania System became satisfied that it was necessary to bring about closer relations with its own employees through committees of men drawn from the ranks; men who understood by personal contact the problems with which they were dealing. One of the officials expressed the prevailing sentiment by saying, "We shall be better off by far if we have our agreements and negotiations between ourselves." The plan, like practically all others, is founded upon the belief that the interests of the employees, the company and the public can best be served by bringing about mutual confidence, sympathetic understanding and real coöperation between employees and management. The fundamental consideration is a frank and friendly relationship which shall not be interfered with by persons or organizations having interests to serve other than those of the railroad. No objection is made to the employee being a member of any other organization; on the contrary, his right to join such organization is specifically recognized. Membership or non-membership in any such organization is given no consideration in formulating the relationship between the company and its employees.

In the case of the Pennsylvania Railroad System, reestablishment of harmonious relationship took the form of giving the employees a voice in the manage-

ment. The first meeting, designed to put such a plan into effect, was held in Philadelphia in December, 1920. The idea of the management was expressed by the Vice President of the company, who spoke as follows:

"The successful solution of the problems that are before you, if carried to a logical conclusion, means that not only will there never be a strike, but that it will never be necessary to take a strike vote on the Pennsylvania system.

"It should mean the setting up of proper machinery for the prompt consideration of changed working conditions and of grievances, and, finally, that failing to agree between yourselves on a settlement of any of these questions, there shall have been provided beforehand the machinery of a tribunal to which the question can be submitted for final decision."

The meeting was unique in that it reversed the usual order. The management was asking for conference with the representatives of the employees, whereas it had been customary for the representatives of the employees to ask for conference with the management. It was an unequivocal recognition of the right of collective bargaining. Its ultimate success will have a material effect upon the relations existing between employers and employees of practically all the railroads of the United States.

The result of this meeting was the joint formulation of a plan whereby all questions of a controversial character arising between the employees of the engine and train service and officers of the company would be handled as a family affair and settled, if possible, without outside intervention. The plan of

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procedure agreed upon became the basis of similar negotiations and understandings affecting employees of other branches of the service. The method to be followed step by step from the division superintendent and the local chairman up to the final arbiter, the joint reviewing committee, has been carefully worked out. The understanding is signed for the management and for the employees. In general the essential features are these:

*First:* Monthly meetings between each division superintendent and the local chairmen representing the employees, at which all controversial matters may be taken up. When there is agreement between the superintendent and local chairmen, the understanding is put into effect at once. The interpretation agreed upon is referred to the Joint Reviewing Committee for review. Disagreement is referred to the Joint Reviewing Committee for decision. A copy of the interpretation agreed upon or a joint statement of the facts where there is a disagreement, is forwarded to the General Superintendent and the General Manager for their information. When appeal is taken from the decision of the Division Superintendent, the question goes to the General Superintendent in charge of a general division.

*Second:* Monthly meetings between each general superintendent and the general chairmen representing the engine and train service employees, in which matters of disagreement between local chairmen and division superintendents are considered. In case of disagreement the question is referred next to the general manager in charge of the region.

*Third:* Monthly meetings between each general manager and general chairmen representing the engine and train service employees for consideration of matters regarding which there is disagreement. Matters of disagreement are referred to joint reviewing committee.

*Fourth:* Monthly meetings of the joint reviewing



committee concerning all matters of disagreement. The joint reviewing committee is the keystone of the arch of satisfactory industrial relations in the Pennsylvania System. It is the highest authority of the railroad in the settlement of matters in dispute; its decisions are final. Executive officers of the company cannot interfere with its prerogatives. It consists of two representatives of the management from each region of the system; the employees are represented by the general chairmen of the engine and train service employees, consisting of nine members.

The following is the method followed by the Joint Reviewing Committee:

"In all matters other than discipline the entire committee will sit.

"In cases of discipline the representatives of the management in the region where the case arises, together with the representatives of the employees involved in that region where the case arises, will not sit on the committee but will present the case to the remaining members of the committee, who will hear and determine the matter at issue.

"The management and the employees will have equal voting power and not less than a two-thirds vote will be necessary to reach a decision.

"In case a decision is not reached by the joint reviewing committee not later than the subsequent monthly meeting at which the case was first brought up, further procedure will be had as determined upon at the time of such disagreement.

"Meeting place of the joint reviewing committee will be fixed from time to time by the committee.

"The chairmanship of the joint reviewing committee alternates every six months between the management representatives and the employees."

One of the first tasks undertaken was the formulation of a new schedule of working conditions. Pre-

viously the men in engine and train service had been working under six different schedules. Due to the fact that prior to the end of the Federal control the Pennsylvania System had not been operated as a unit, there were many points of difference between the schedules, and many disputed questions. Employees in engine and train service, following the return of the railway to private operation, requested that a general schedule be established which would harmonize the differences between existing schedules. This work was under negotiation for several months and was finally settled to the satisfaction of all concerned. The joint reviewing committee has since acted upon any questions arising in the application of the new schedule.

In carrying out this policy, the management felt that the essential thing to determine was whether there should be representation of employees. This was left entirely to the employees themselves, with the proviso that the representatives be elected by the employees, and that those elected be employees themselves. In making announcement to the men, the management stated that it was "the right of the employee to have a voice in determining the rules and regulations under which he should work." This announcement also contained the following statements:

"The employees have the right to select their representatives from among their own number."

"The men thus selected will be recognized by the management as empowered to speak for the men by whom they are chosen."

"The representatives chosen by the employees may or

may not be union men, as the employees themselves decide."

"The representatives so chosen will be protected in their position no matter what may be their attitude with reference to the provisions of such rules and regulations."

"They will be provided with the necessary transportation, and the company will reimburse them for time lost and for reasonable expenses while on this service."

"The above applies to a union man as well as to a non-union man."

"There are three 'MUSTS' that we will have to work out in coöperation:

- "1. The public MUST have efficient and economical service.
- "2. The officers and the employees MUST be paid good wages, in return for good service rendered.
- "3. We MUST earn a reasonable return on the capital invested in the property."

There was a good deal of skepticism upon the part of the employees; the task was not an easy one, but the program went forward. Arrangements were made to call into conference with the officers the general chairman and committee of the United Brotherhood of Maintenance of Way Employees and Railway Shop Laborers, and later on the general chairman and committee of the Brotherhood of Railway Signalmen of America. A complete election procedure was worked out. The voting was strictly secret, and was under the joint supervision of the management and the men. Some classes of employees elected all union men to represent them. Some classes elected part union and part non-union representatives. All received identical treatment from the management.

The plan of procedure finally agreed to in handling disputes included the following:

- "1. Local Committees for the Divisions and General Divisions. Regional and System committees for the handling of matters appealed from the divisions and general divisions.
- "2. Joint committees, similar to the Joint Reviewing Committee, composed of equal representation of management and employees, all members having equal voting power, with two-thirds vote necessary to decide any issue.
- "3. By-laws governing procedure of these committees, schedules of meetings with division, general division superintendents and general managers and future election machinery for the election of successive employee representatives at regular periods."

There are some variations to meet special conditions, but the policies are all identical in principle.

The case of the Pennsylvania Railroad System is particularly interesting, as it demonstrates the possibility of having shop representation and collective bargaining within a corporation while many of the workmen are at the same time members of various union organizations. The plan not only recognizes the right of collective bargaining but is primarily based upon that very principle. There is a prevailing opinion, among labor union officials, that collective bargaining is only genuine when one party to the collective bargain is a national labor union. This was the rock upon which President Wilson's First Industrial Relations Conference split. On the other hand, real collective bargaining actually exists when, regardless of whether or not they are members

of unions, the employees in a given industry are recognized and dealt with collectively through democratically nominated and elected representatives chosen by secret ballot and authorized to speak and act for those who elect them.

This plan has promoted sympathetic and harmonious coöperation, being notably successful at the time of the national Railroad Shopmen's strike in July, 1922. Less than 30 per cent of the Pennsylvania shopmen left the service, and within two months the force had been restored to more than 95 per cent of normal. The great majority of the employees who remained at work did so under regulations which had been agreed upon between the management and the representatives of the employees elected the year before.

Evidence that Pennsylvania employees themselves favor the plan is abundant. For instance, in the Fall of 1921, when the United States was threatened with a general strike of engine and train service employees on all railroads, the train service employees on the Pennsylvania voted against the strike. The Pennsylvania was practically the only large railroad on which such a positive declaration against striking was made. Perhaps the most conclusive evidence, however, is the actual proportion of the employees balloting for representatives. From 75 to 90 per cent of the employees in the various classes concerned, numbering approximately 175,000 of about 190,000 eligible to vote, actually voted in these elections and the number of invalid ballots cast amounted in the aggregate to only about 5 per cent of the total.

Employee Representation on the Pennsylvania Railroad is only one phase of the company's consistent policy, and practice, of providing satisfactory relationships between men and management, and attracting to the service men of the very best type. The company is not paternalistic, but it does believe in providing means whereby a man may not only be contented in his job, and advanced in the service, but also providing for the welfare and happiness of his family.

The most outstanding fact about the whole Pennsylvania Plan, as compared with other established methods of dealing with employees, is that no other system goes "all the way" in the joint handling of controversial questions. In other words, there is no veto power over the decisions of the joint committees of officers and employees, acting upon any question submitted to them, and these questions include all matters that directly concern employees in their relation to their job, their wages, hours of service, other working conditions and discipline.

The plan has now been in effect almost four years and continues to give general satisfaction. It perhaps points the way to future industrial relations between the management of great corporations in general and their employees, many of whom happen to be members of labor unions.

The Baltimore and Ohio Railroad has tried still another type of plan. Like all the others it is an effort to promote more satisfactory relations between the men and the management. Unlike most of the others, however, it unreservedly places control in the hands of men operating through their

unions. So far it has been attempted only in connection with the shop crafts.

The plan is the outgrowth of the shop strike in 1922. At that time the B. & O. agreed to recognize the shop unions as the agencies fitted to assume responsibilities for the proper operation of the shops. Piece work, bonus systems and the like are discarded. Such systems, it is contended, promote discord among the men and result in unnecessary friction. For these a new spirit of coöperation is substituted, which, it is said, produces far more satisfactory results. To the other responsibilities of the unions have been added new responsibilities relating to the operation of the B. & O. shops.

The particular interest attaching to this plan lies in the fact that it is clean-cut recognition of the unions as the responsible agencies in shop management. None of the other plans cited adopt this policy. Some recognize local unions only; others make no distinction between union and non-union men; the B. & O. is the only one that works under a "closed shop" policy. It is true that the plan applies only to the shop organization, but it is nevertheless extremely interesting as an example of "closed shop" practice.

The federation of shop crafts is said to speak for some 25,000 shopmen. The following declaration of principles has been signed by both parties:

"The welfare of the Baltimore and Ohio and its employees is dependent upon the service which the railroad renders the public. Improvement in this service and economy in operating and maintenance expenses are greatly promoted by willing coöperation between the

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railroad management and the voluntary organizations of its employees. When the groups responsible for better service and greater efficiency share fairly in the benefits which follow their joint efforts, improvements in the conduct of the railroad are greatly encouraged. The parties to this agreement recognize the foregoing principles and agree to be governed by them in their relations."

Meetings between the local managing officials and the local shop committee are held, minutes are kept and all matters pertaining to shop, yard and round-house operation are discussed. To this extent a new relationship has been set up in that the men through their accredited union representatives participate in the management. This is fundamental in all so-called Industrial Democracy plans, as is the idea that the gains of coöperation are to be shared in the form of steady work and higher wages.

The B. & O. plan may be summarized as follows: <sup>1</sup>

1. "The unions continue to operate identically as before, so far as wages and hours are concerned. The union workers act, every step of the way, through their regular international unions and the representatives of those unions.

2. An extension is made to the power of the organized workers, consisting of the job of taking part in shop management. These questions—of waste, conditions, proper tools, etc.—are in the hands of the regular union shop committees. No new machinery is created to carry out this campaign of waste destruction.

3. The union workers employ an efficiency engineer to represent them on questions of waste elimination, good tools, etc. He has all the rights—so far as the railroad is concerned, to make demands that the union representatives have.

4. The union guarantees that in this way the railroad

<sup>1</sup> Excerpted from *Labor Age* of March 1924.



rolling-stock will be improved. This is not a guarantee to secure any set amount of production, but merely a general agreement that the idea will produce such a result.

5. The railroad agrees that it will increase wages (as the good results of the idea are shown) that it will give steady employment, and will not contract its repair work out to anti-union concerns.

6. There is no introduction of a speeding up or super-efficiency system. The stress is on doing away with wasteful conditions in the shop, such as scrapping of one locomotive to repair another, better working conditions, etc."

It will be extremely interesting to watch the working out of these two systems; the Pennsylvania, on the one hand, operating on an "open shop" basis; the B. & O., on the other hand, operating as a "closed shop"; but both aiming, apparently, for the same objective: better service, greater efficiency, lower costs and higher wages as the result of these things.

Another type of plan is that of the so-called Industrial Democracy of John Leitch. This plan takes its inspiration from the organization of the government of the United States. It has a House composed of representatives of the employees elected by secret ballot, a Senate composed of bosses and foremen, and a Cabinet composed of executive officials to whom appeal may be taken. First installed in 1909, the plan has made steady and satisfactory progress. It has gained particularly strong foothold in the textile and clothing industries. Notable examples of its success are to be found in the following companies: The Sidney Blumenthal Company of Shelton, Connecticut, where the plan has been in force for six years; the Windsor Print Works, North

Adams, Massachusetts, where it has been in operation four and one-half years, and the Packard Piano Company at Fort Wayne, Indiana.

Consideration of this plan involves a fascinating study of human nature. Its author, fired with the spirit of the crusaders, has for years been employed in installing his plan and watching its operation. Some of the results it has produced are little short of startling, and constitute a direct refutation of arguments made for either the open or the closed shop. Output has been increased, costs reduced, and the increased profits have been shared both by the company and the employees. Believing implicitly in justice as the fundamental principle essential to the success of any relationship between employer and employee, John Leitch has attempted to make justice the foundation stone upon which this mutual relationship shall be built. That he has succeeded is best indicated by the number of corporations using this plan. The principle is of course the one which must actuate all of this type of coöperative effort, if it is to succeed, and may be summed up in two words, "square deal."

Such plans as those above indicated will succeed in exact proportion to the honesty and integrity of purpose with which they are applied. If they are used as camouflage to hide a desire to disrupt unionism, and what real unionism stands for, if they are made the vehicle for attempts unjustly to increase hours, cut wages, and destroy much that has been gained, these shop representation plans will fail, and we shall witness renewed and more bitter industrial warfare. These plans will not entirely supersede the

unions, rather should they supplement such effort, tempering it perhaps by giving notice that unreasonable, unjust and impossible demands will not be acceded to.

As part, of course, of the problem, employers' associations are to be reckoned with. Organized, in part, to combat unjust labor demands, they have, in some instances, attempted the destruction of the unions. Nothing more unwise, or short-sighted, could be imagined. Unionism, properly conducted, is the bulwark against radicalism. Improperly conducted, it will ultimately destroy itself through the antagonisms engendered.

Plans such as those above indicated are difficult of application in some lines of industry, notably the building trades. In this class of work many small contractors approach the intimate relationship of a century or more ago, perhaps the most satisfactory relationship of all. Some large contractors may be able to make shop representation effective, but on the whole it seems to be a situation in which the struggle is between union and non-union forces. Unionism will win only in the event that objectionable practices of the past be eliminated.

There is still the other angle to be considered—the combination of capital and labor in an unholy alliance to graft upon the public. The conditions uncovered in New York in 1920 are glaring examples of such nefarious practice. The episode and its aftermath again proved that if we are to have harmonious and satisfactory conditions, they can come only through mutual recognition of the rights of all parties.

The whole picture, therefore, is one that recognizes the right of both parties to organize for mutual protection, not overlooking the rights of the public, the third party at interest, which, after all, is the final arbiter. This right to organize, its success, the benefits to be derived therefrom depend upon the recognition of the limitation of economic law, and, above all, upon the recognition of the righteousness and justness of the "square deal"; the fundamental upon which all collective and joint efforts must be based. Failing such realization, labor unions, employers' organizations, "shop committees," and all similar activities, will produce nothing of lasting benefit.

One of the most encouraging signs for future harmony, as between labor and capital, is the fact that labor has entered the capitalistic field. Within less than 5 years no less than twenty banks have been established under the auspices of labor. The Brotherhood of Locomotive Engineers' Coöperative National Bank, of Cleveland, Ohio, is probably the largest. There are others in various American cities, including Washington, Chicago, Birmingham, Minneapolis, St. Louis, Spokane and San Bernardino, California. Others are being rapidly organized. There are various reasons given for this new policy, one of the most plausible being that trade unionists realize the failure of their tactics in the past, and, so far as the old methods are concerned, that the labor unions are at the end of their rope, and that progress in the future depends upon the adoption of new methods. The belief is fairly widespread that progress of the future must be made by entrance of labor

into the field of business and industrial control. The significant fact is that the movement has met, in its early beginnings, with marked success. Nothing that trade unions have done for years has aroused such interest. Prudently managed, and provided they give a satisfactory and needed service, there seems to be no reason why such banks should not grow. If these institutions can promote confidence among the rank and file, guide them in making sound investments, teach them the principles of sound economics, they will have performed a real service for the community as a whole. It seems fairly evident that the Locomotive Engineers, at least, through their banks and investment corporation, are accomplishing for their members a service that it would be difficult for a private institution to achieve. There could be no greater catastrophe than the failure of these institutions to make good. Learning by experience the problems of capital is the surest way to promote harmonious relations; making capitalists out of wage-earners is the surest way to safeguard capital.

The relation of government to the problem of capital and labor is obvious in general outline, difficult if not impossible to state in detail. Government should protect life and property, insist upon satisfactory sanitary conditions, demand that proper safety measures and reasonable hours be observed. Intervention upon the part of government should come only as a last resort, and then only to avert a national calamity. Who shall judge when such conditions arise? What measures are to be taken and how are, of course, the vital factors that are difficult,

if not impossible, to determine in advance. There have been some suggestions made, some plans proposed. The most notable is the program presented by the President's Industrial Conference, appointed by President Wilson, and of which Herbert Hoover was Vice Chairman.

The very fact that these experiments in industrial democracy are so widespread and so numerous is proof that the old conditions do not satisfy. It is freely admitted by those best qualified to speak that the program is experimental; that there is as yet no standard practice. But equally, it is agreed that the goal is in all cases the same; better service, better working conditions, greater efficiency, lower costs and higher wages. If all these things are attained the system under which it is made possible will, of course, become dominant.

## CHAPTER X

### CONCLUSIONS

Nothing is easier than to fancy systems for the happiness of nations and nothing more difficult than to realize them.

—PLUTARCH, *de Fortitudine Alexandri*, Vol. II, page 23.

WE have seen that historical data covering twenty centuries afford no encouragement to those who offer paternalism as the panacea for human ills. We have seen that communism and socialism have, throughout the ages, signally failed to improve the condition of mankind; that in place of producing happiness they have invariably led to misery. We have seen that the rise of modern industrialism, in the last century, has worked great changes in the relations of the urban to the rural population. We have seen the rapid growth of population; the increase in national wealth; the awakening consciousness of the people, their mounting demands for more and more of the products of the earth. Former luxuries have become necessities; the standard of living of the masses is far beyond that of the wealthy of a few centuries ago. But this progressive development brings with it certain penalties. The structure we have created is exceedingly complex. Our interdependence is our weakness, our urban growth a menace to our institutions. We have come to rely upon each other so completely that we must individually

perform our allotted tasks if collectively we are to survive.

It is the function of government to coördinate the agricultural and industrial activities, to aid, to co-operate and supervise, so that the fabric of modern civilization may be upheld. It is obvious that the wise exercise of the governmental function is of vital importance. It can be successfully administered only through intelligent understanding of the problems involved. There are a number of basic principles, the recognition of which is essential to such understanding. Among these are a few which it is well to emphasize:

1st. Production and more production is the natural answer to the increasing demands of humanity, but this cannot go on forever without restriction. The consumption of our irreplaceable mineral resources presents a complex problem containing opposing factors. The prosperity of to-day calls for an increasing rate of consumption, while paradoxically the welfare of future generations demands conservation. A careful study of the question by competent authority is imperative. Whatever the outcome, it is certain that squandering must be eliminated in order to extend, as long as possible, the condition upon which our national prosperity depends, so far as we are now able to judge.

2d. The demand for adequate production can be satisfied only through individual compensation for the task performed, for without reward history proves conclusively that man will not work. It follows, therefore, that all forms of socialism, communism and the like, which have for their objective



the support of the lazy and improvident by the frugal and thrifty must be eradicated if we are to have the maximum of human happiness.

3d. This can be accomplished only through proper education of the people. It must be proved to them that their own best interests demand retention and protection of American individualism, with full reward for individual effort.

4th. In the interests of the people there must be proper governmental supervision of our great public utility corporations, which are necessarily monopolistic in character. This supervision, while insistent, should be helpful rather than punitive.

5th. Public welfare demands harmonious, sympathetic and wise coöperation between government, labor, and capital.

In the foregoing pages it is abundantly indicated that the rapid growth of individual demands and requirements for the products of our mineral resources cannot go on indefinitely without restriction.

The world over, there is a very limited supply of certain minerals which appear to us as essential to our present form of civilization. We were originally endowed with more than our fair share of these; still our present rate of consumption, with the indicated rate of increase in the near future, if unchecked, points to exhaustion of many of our known reserves within a comparatively few generations. No one can foretell what improved methods of extraction and utilization of low-grade products may accomplish or what substitutes may be provided, but as matters stand to-day this rapid con-

sumption appears as a grave threat to the welfare of posterity. Once fully recognized, our national conscience, it would seem, should demand action upon this matter. Its adjustment cannot be left to individuals or corporations; it is fundamentally a function of government.

It is suggested, therefore, that there be created by Congress a Minerals Commission to which shall be assigned the task of considering the problem of conserving the mineral resources of the United States, devising, as well, a policy for this government to adopt with regard to foreign sources of supply. This Commission should submit to Congress recommendations for such legislation as may be necessary to safeguard our national welfare, over the longest possible period. It goes without saying that the members of this Commission should be men who, through personal success in the fields of industry, have proved not only their ability, but their integrity as well. If appointments to such a commission should be governed by political consideration, it would be better if the Commission were not created.

It is well known that our timber is being too rapidly consumed and the government will soon have to undertake or insist upon reforestation; also that sooner or later the impoverishment of our agricultural lands will have to be remedied; but these matters are not so immediately pressing as the conservation of minerals.

If our republican form of government is to live, it will be because our people are fit to govern themselves. Fitness to do this requires an intelligent conception and understanding of the principles of gov-

ernment and their proper method of application. Washington, during war time, was full of able men, patriotic citizens, serving with high-minded devotion, many of them executives of great ability. Conference after conference was held, plan after plan prepared, procedure after procedure suggested, all to be nullified by the inertia of Congress. We were proving our inability to govern ourselves properly. It is reminiscent of the remark of the Persian to the Greek who, twenty-three centuries ago, the night before the battle of Platea, said: "The saddest memories of political life are the moments in which one has to stand idly by when golden opportunities are being lost, to see the wrong thing done when it would have been easy to do the right thing." It may be too much to expect that this inertia will be overcome, but it is certainly not asking too much that, because of it, industry be neither nationalized nor brought too widely under government control.

What is needed to-day, and what will become more and more necessary as the years go on, as our population increases and our problems become still more complex, is the intelligent and unbiased analysis of the trained engineering mind, which, free from the political pressure of the moment, calmly and dispassionately places before the public the facts as they really exist. The demand for expert analysis and clear presentation of fact is becoming more and more urgent by sheer weight of economic pressure.

In the future, there may be a national spirit which will accomplish much that is now impossible. We may as a people come to realize that recognition of the merit of service to the government is an attri-

bute of the highest type of citizenship. Our citizens may seek the honors of governmental service as the crowning rewards of their careers. Great executives may be glad to divest themselves of industrial activity and dedicate a few of the later years of their lives to governmental service in behalf of the people. There may be created industrial boards which will have all the dignity of the Supreme Court. A seat upon them may be as eagerly sought by our industrial leaders as a seat upon our Supreme Bench by present-day lawyers. There are men of great ability and high standing who are ready and willing to-day to render such service if the public would demand it. They cannot compete for public favor with the blatant demagogue who, like the socialist and the communist, promises everything and gives nothing. The importance of having such men in office must be recognized by the people; the call for such service must come from the people. It is, perhaps, too much to expect in the near future, but it can at least be hoped for.

In order to prepare the youth of the nation for self-government, our preparatory schools and universities should make obligatory certain courses of instruction in the elements of government. The students should be led to know something of American Individualism and its accomplishments; to understand and appreciate the obligations and duties of American citizenship. Properly prepared textbooks should be introduced to set forth clearly and in the simplest possible manner the essential functions of government, and its necessary relation to the individual and to industry. The distinction

between a "pure democracy" and a "representative republic," such as ours, should be made plain. The true reasons for the failure of direct rule by the people should be presented. To date our schools have failed to give such instruction. Abysmal ignorance of the obligation of the citizen to the government and the government to the citizen is manifested, not only by pupils but by teachers as well. Erroneous, mischievous and impractical ideas are current to the extinction or submergence of sound economic principles.

Government cannot muddle along in the future as it has in the past. The factor of safety is approaching too near to the danger line. Increasing population and taxation, decreasing assimilation, disappearance of unsettled territory, modern transportation facilities, the telephone, the telegraph, the radio, the airplane and other adjuncts of our present-day life, tend to make ineffective old methods that in their day and generation were sufficient to meet the needs of the time.

Coöperation is the principle upon which our future relations must be founded. Increasing population, and the complexities of modern civilization, make it impossible for the old type of individual effort to render the necessary service. The growth of industrialism has been marked by the rise of great corporations. In our anxiety to curb the abuse of power, by aggregated capital, we curbed the constructive utility and entered upon an era of anti-trust legislation. It has been ineffective because it has run counter to economic law. The course to be followed in the future points towards coöperation

and coördination, not only between the various industrial units, but between industry and government, and above all between government, capital, and labor. The form of shop representation coming so prominently into evidence as an offset to the unwisdom of some forms of the labor movement will, if wisely administered, make still further progress and yield further benefits. It should, in the future, go far toward giving the individual a stimulating interest in his work and preventing unrest, because of the right of self-expression which it carries with it. Coöperative action between capital and labor in the solution of the housing problem makes it possible for the individual to enjoy congenial surroundings and acquire his own home at a satisfactory price, and thus leads to happiness and loyalty to the state. There is perhaps no type of coöperative effort that offers greater rewards than joint action in providing satisfactory homes for the workmen. Attaching the individual to the soil, either through ownership of his farm or his city home, is of highest national importance.

The complexities of modern civilization, with the attendant problems of increasing population and diminishing natural resources, will, if civilization is to survive, force the government to more efficient administration. It is utterly impossible for any one citizen to be sufficiently well informed upon all subjects involved in the modern relation of government to industry to enable him to pass intelligently upon the merits or demerits of all proposed activities, but our representatives should at least have a fair knowledge of the fundamental principles which govern.

Our elective officials, frequently unqualified by training or experience, are often less fitted to pass upon the merits or demerits of many questions relating to government than is the average well-informed citizen in private life.

In consideration of the serious character of our government's responsibilities in the near future, our representatives would do well to delegate much of the governmental function to qualified hands free from political influence. This is the antithesis of the program of direct legislation by the people, with which many of our states have been inflicted of late years.

Over decades and generations, the loyal and skillful hands of many individuals have upbuilt American industrialism. To the task many men and women have given themselves even to the extent of the great sacrifice. They have dedicated their lives to the advancement of civilization. And so, generation after generation, they have come forward, performed their allotted tasks and disappeared into the oblivion of the ages. They have labored well in the creation of a great edifice designed to promote human happiness. Exceedingly complex and as delicate as a chronometer in its adjustments, it functions satisfactorily as a whole only if its component parts function properly. The pioneers and their descendants, the developers of our resources, the builders of our cities and systems of transportation, the leaders and workers of our industries, have together built a monument to the righteousness of individualism. It is this structure which the irresponsible socialists, communists and the like would destroy that they

might rear in its place a structure of their own design, which would yield despotic tyranny instead of liberty, improvidence instead of thrift, class hatred instead of coöperation, the squalor of idleness instead of human happiness based upon rational employment. It is proper that we should dedicate our lives to the protection of that which our ancestors have built. It is proper that our children and our children's children should equally dedicate theirs to the preservation of American ideals as typified by American Individualism.



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